ALICE MERNER AGOGINO – C.V.

EDUCATION

- B.S. (1975), Mechanical Engineering, University of New Mexico
- M.S. (1978), Mechanical Engineering, University of California, Berkeley
- Ph.D. (1984), Engineering-Economic Systems (renamed Management Science and Engineering), Stanford University

PROFESSIONAL EMPLOYMENT

- Roscoe and Elizabeth Hughes Professor of Mechanical Engineering, University of California at Berkeley, Emeritus, 2021-present
- Professor of the Graduate School, 2021-present
- CEO, Squishy Robotics, Inc., 2017-present
- Roscoe and Elizabeth Hughes Professor of Mechanical Engineering, University of California at Berkeley, 1998-2021
- Education Director, Blum Center for Developing Economies (2016-2022)
- Chair, Graduate Group, Development Engineering (2014-2022)
- Chair, Faculty Academic Senate, Berkeley Division, 2005-2006; Vice Chair, 2004-2005
- Faculty Assistant to Executive Vice Chancellor & Provost Paul Gray (2000-2001) and Executive Vice Chancellor & Provost Carol Christ (1999-2000) in Educational Development and Technology, University of California at Berkeley
- Director, Instructional Technology Program, University of California at Berkeley, 1999-2001
- Associate Dean of Special Programs, College of Engineering, University of California at Berkeley, 1995-1999
- Professor of Mechanical Engineering, University of California at Berkeley, 1992-2021
- Associate Professor of Mechanical Engineering, University of California at Berkeley, 1988-92
- Assistant Professor of Mechanical Engineering, University of California at Berkeley, 1984-1988
- Agogino Engineering, Principal of engineering and management consulting firm, 1979-present
- Director, Women-in-Engineering Program, University of Santa Clara, California, 1980-1981
- Systems Analyst, SRI International, Menlo Park, California, 1980
- Commercial Specialist, General Electric, San Jose, California, 1978-1979
- Mechanical Engineer, General Electric, San Jose and Sunnyvale, California, 1975-1978
- Project Engineer (Co-op), Dow Chemical, Freeport, Texas, 1972-1973

_____

HONORS AND AWARDS

- 2023 Listed as 50 over 50: Innovation category, Forbes Magazine.
- 2022 Squishy Robotics wins 2022 Each Bay Innovation Award in the Engineering & Design category. Received a Certificate of Recognition from both and from the California State Assembly the <u>California State Senate</u> in honor of the EDA's award.
- 2022, Certificate of Appreciation "for many years of distinguished teaching in the Freshman and Sophomore Seminar Program"
- 2021Berkeley Faculty Service Award, Faculty Senate, UC Berkeley
- 2020 Athena Award for Academic Leadership. The award was presented on March 6, 2020 at the Reimagining Cybersecurity for All Symposium in Berkeley.
- 2020 ASME DTM Best Paper Award for "Method Selection in Human-Centered Design Teams: An Examination of Decision-Making Strategies," (with Vivek Rao, Euiyoung Kim, Jieun Kwon, Kosa Goucher-Lambert), *Proceedings of the ASME International Design Engineering Technical Conference (IDETC 2020)* (16-19 August 2020, St. Louis, MO).
- 2019 Won First Place in the TechPlanter Silicon Valley pitch competition on Squishy Robotics.
- 2018 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring.
- 2017 ASME Design Theory and Methodology Award: *to recognize sustained and meritorious contributions to research; education; service; training of researchers or practitioners; overall leadership in advancing the field; or any combination of these in the field of Design Theory and Methodology.*
- 2017 Georgia Tech's Women in Science and Technology Distinguished Lecture Award, Feb. 28, 2017. Lecture title: Design for Social Impact: Multiple Dimensions of Diversity in Science, Mathematics, Engineering and Medical (STEM) Education and Careers.
- 2016 Best Paper Award (with Euiyoung Kim, Jaewoo Chung, and Sara Beckman), Design Theory and Methods (DTM), International Design Engineering Technical Conference (IDETC), 2016. Paper title: "Design Roadmapping: A Framework and Case Study of Planning Development of High-Tech Products in Silicon Valley".
- 2015 ASME Ruth and Joel Spira Outstanding Design Educator Award f*or tireless efforts in furthering engineering design education including curriculum changes that blend cutting-edge design topics with state-of-the-art educational practices; promoting wide-ranging interaction between industry and students; performing game-changing design research; and mentoring the next generation of designers, educators, researchers and engineers*. The award was presented at the 2015 International Design and Engineering Technical Conference (IDETC).
- 2015 Reviewers' Favourite award at ICED15 for paper titled "Design Roadmapping: Challenges and Opportunities" (with Euiyoung Kim and Shun Yao), 2015.

_____

- 2015 Reviewers' Favourite award at ICED15 for paper titled "Design Talking: An Ontology of Design Methods to Support a Common Language of Design (with Celeste Roschuni, Julia Kramer, Qian Zhang and Lauren Zakshorn), 2015.
- 2015 Faculty sponsor for Big Ideas Competition: First Place in Global Health for the proposal: Visualize: Saving Lives with Training for Cervical Cancer Screening, (Julia Kramer as student lead), 2015.
- 2014 Finalist (of four) for Best Student Paper Award (doctoral student Kyunam Kim was the lead author), 2014 IEEE International Conference on Robotics and Biomimetics for paper: "Rapid Prototyping Design and Control of Tensegrity Soft Robot for Locomotion".
- 2014 IEEE Senior Member.
- 2014 Awardee and Keynote Speaker at Assemblymember Nancy Skinner STEM Women of the Year.
- 2013 "Reviewers' Favourite Award" at the 2013 International Conference on Engineering Design for paper "Human-Centric Study of Digital-Paper Transitions: Framing Design Opportunity Spaces" (with E.Y. Kim, V.S. Kocsik, C.E. Basnage).
- 2012 Lifetime Mentor Award, AAAS. Citation: *for efforts to significantly increase the number of women and African- and Hispanic-American doctorates in mechanical engineering.*
- 2013 Faculty Sponsor of student team in the Max Tech and Beyond Appliance Design Competition: Ultra-Low Energy Use Appliance Design Competition. Project title: "User-Centric And Self-Commissioning Predictive-Model-Based Lighting Retrofit System", LBNL, Department of Energy, 2012-13.
- 2012 Academy of Distinguished Alumni, University of New Mexico.
- 2011 Leon Gaster Best Paper Award for Lighting Technology for 2011 for the paper "Control of Wireless-networked Lighting in Open-plan Offices" (with Yao-Jung Wen) published in Volume 43 Issue 2 of *Lighting Research & Technology*. The award was announced at the Society of Light and Lighting's Annual General Meeting and Awards evening on 29 May 2012 at ZSL, Regent's Park, London.
- 2011 Professor of the Year, UC Berkeley Pi Tau Sigma. Citation: *demonstrated time and again her commitment to high academic standards and improving the undergraduate experience for Mechanical Engineering students.*
- 2011 Faculty sponsor for Co-Winner, First Place in Social Entrepreneurship Competition, "Class Projects to Social Ventures", Big Ideas Contest.
- 2011 Faculty sponsor for Co-Winner, Second Place in Social Justice, Community Engagement Competition, "Students-Community Collaborative Design Challenge", Big Ideas Contest.
- 2011 Best Note Honorable Mention, ""GreenHat: Exploring the Natural Environment through Experts' Perspectives," (with Kimiko Ryokai, Lora and Michael Manoochehri) ACM CHI (Conference on Human Factors in Computing Systems).
- 2010 Chancellor's Awards for Public Service. CARES (Community Assessment for Renewable Energy and Sustainability) Team wins the 2010 Chancellor's Award for Campus-Community Programs.

_____

- 2009 Honorable Mention, Curricular Innovations, Bears Breaking Boundaries Competition, the Pinoleville Pomo Nation project; Finalist in the Information Technology for CARES (Community Assessment of Renewable Energy and Sustainability).
- 2007 Finalist, Smart Lighting Project, Venture Lab Competition, Center for Entrepreneurship and Technology.
- 2007 Faculty Award for Excellence in Graduate Student Mentoring, Mechanical Engineering Graduate Student Council.
- 2006 Chancellor's Award for Advancing Institutional Excellence.
- 2005 Elected Fellow of the American Society of Mechanical Engineers.
- 2005 IEEE Robotics & Automation Society Best Paper Award for "Microfabrication and Characterization of Evolutionary MEMS Resonators," at the Symposium of Micro- and Nano-Mechatronics for Information-based Society (with R. Kamalian and Y. Zhang).
- 2004 ASME Xerox Best Paper Award, "Insights on Designers' Sketching Activities in New Product Design Teams", ASME Design Engineering Technical Conference in Salt Lake City (with Shuang Song).
- 2004 NSF Director's Award for Distinguished Teaching Scholars.
- 2001 Fellow, Association for Women in Science (AWIS).
- 2001 First Runner-up for the Novel Smart Engineering System Design Award (with Ningning Zhou, Bo Zhu and Kris Pister), ASME/IEEE.
- 1998 IEEE Helen Plants Award for "Best Non-Traditional Session at Frontiers in Education".
- 1998 Best Overall Paper Award, ASEE, "Engineering for Middle School: A Web-based Module for Learning and Designing with Simple Machines" (with Ann McKenna).
- 1998 Roscoe and Elizabeth Hughes Chair of Mechanical Engineering (1998-to date)
- 1997 Best Paper Award, "Integrating Design, Analysis and Problem Solving in an Introduction to Engineering Curriculum for High School Students," (with Ann McKenna), ASEE/IEEE Frontiers in Engineering Education Conference.
- 1997 John Wiley & Sons Premier Courseware Award (with D. Yu) for "Virtual Disk Drive Design Studio" CD ROM.
- 1997 Elected to the National Academy of Engineering with citation "*for applications of artificial intelligence to manufacturing, and for reform efforts in engineering education*".
- 1996 Best Paper Award, "Text Analysis for Constructing Design Representations," (with A. Dong), Artificial Intelligence in Design '96 Conference (Stanford, CA).
- 1994 Fellow, American Association for the Advancement of Science.
- 1992 Best Paper at the Conference on AI Applications, "A Structural and Behavioral Reasoning System for Diagnosing Large-Scale Systems," (with Bob Paasch).
- 1992 Most Outstanding Alumnus, Dept. of Mechanical Engineering, University of New Mexico.

_____

- 1991 Best Paper Award, "An Intelligent Real Time Design Methodology for Component Selection," (with S. Bradley), ASME Design, Theory and Methods Conference.
- 1988 Young Manufacturing Engineer of the Year, Society of Manufacturing Engineers.
- 1987 Ralph R. Teetor Educator Award, Society of Automotive Engineers.
- 1986 Pi Tau Sigma Award for Excellence in Teaching.
- 1985 IBM Faculty Development Award, 1985-1986.
- 1985 National Science Foundation Presidential Young Investigator.
- 1977 Chancellor's Honorary Fellow in Mechanical Engineering at the UC Berkeley.
- 1973 Pi Tau Sigma Academic Honor Award.
- Honorary Membership: Tau Beta Pi, Phi Kappa Phi, Pi Tau Sigma.

_____

PROFESSIONAL ACTIVITIES

- Member: AAAI, AAAS, ASEE, ASME, AWIS, IEEE, SWE
- Member, Search Committee for the NSF Associate Director of Engineering, 2020-21.
- Member, Addressing the Impact of Sexual Harassment in Academia on the Career Choices of Women in Science, Engineering, and Medicine, National Academies.
- Steering Committee, NSF ESDE Design Circle Workshop, Oregon State University, Corvallis, OR, March 22-24, 2018.
- President and Co-Founder, Squishy Robotics, Inc, 2017.
- Member, Board of Directors for Acorn Labs, Inc., a nonprofit benefit corporation to increase interest in STEM disciplines through maker labs.
- Advisory Board, AI, Robotics and Education Association (AIRE), 2018-present.
- Faculty Advisor, UC Berkeley Section of Pi Tau Sigma (Mechanical Engineering Honor Society), 2014-2018.
- Faculty Advisor, Engineers for a Sustainable World (UC Berkeley Chapter), 2014-2021.
- Founding Faculty Advisor, Berkeley Innovation, an undergraduate human-centered design group at the UC Berkeley who teach the {design.} decal course on human-centered design, 2003-2021.
- Chair (2017+), Member (2012-2017), Scientific Advisory Board, Singapore University of Technology and Design SUTD-MIT International Design Centre (IDC),
- Member, International Review Panel, Ministry of Education, for the Singapore University of Technology and Design SUTD-MIT International Design Centre (IDC), 2017).
- Member, Advisory Review Committee, Carnegie Mellon University, Carnegie Institute of Technology, 2017+
- Member, Advisory Board, Rangzen: Circumventing Government-Imposed Communication Blackouts and the Denovo Group. 2013-2016
- Member, President's International Advisory Council, King Abdullah's University of Science and Technology (KAUST), 2012-2013
- Member, Board of Directors, UnaMesa Association – Tools and Services for Learning and Caring. The UnaMesa Association is a non-profit, world-wide association of individuals from industry, academia, and NGOs that provides free software tools and web services for schools, clinics, and other community organizations, 2006-present.
- Member, Board of Directors, Technology Innovation for Sustainable Solutions (TISS). The flagship project of TISS is the Darfur Stoves Project, 2008-2011.
- Counsellor, National Academy of Engineering (NAE), 2008-2014
- Member, Board of Trustees of the National Academy of Engineering Fund, National Academy of Engineering (NAE), 2012-2013
- Member, Committee on Women in Science, Engineering, and Medicine (CWSEM), National Academies, 2009-present.

_____

- Reviewer for UNESCO, Panel review for Big Data Center in Hangzhou, China, Fall 2012
- Member, Committee for Assessing Foreign Technology Development in Human Performance Modification, National Research Council of the National Academies, 2011-2012
- Member, Advisory Board, Science and Math Informal Educators (SMILE), Lawrence Hall of Science, 2008-present
- Member, Advisory Group, Online Ethics Center, National Academy of Engineering (NAE), 2008-present
- Organizing Committee, Mudd Design Conferences, Harvey Mudd College, 2009-present.
- Member, Fellows Committee, American Society of Mechanical Engineers (ASME), 2008-2010
- Member, Advisory Committee, Mudd Design Conferences, 2004-11
- Co-Chair, Mechanical Engineering Nominating Committee for the National Academy of Engineering (NAE), 2007-2008
- Reviewer, and Secondary Education Program, National Aeronautics and Space Administration (NASA), 2007-2008
- Member, National Advisory Board, Prototype to Production (P2P), 2007-2008.
- Chair, Mechanical Engineering Peer Committee for the National Academy of Engineering (NAE), 2005-06; Vice Chair, 2004-05 (Member, Feb. 1, 2003-January 31, 2006)
- Member, Board of Directors, Center for Education, ASME (2004-06)
- Member, National Academies Board on Science Education (BOSE, 2005-2007)
- Member, Committee on Science, Engineering, and Public Policy (COSEPUP; 2007-2010).
- Member, Committee on Maximizing the Potential of Women in Academic Science and Engineering, Published: Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering, Committee on Science, Engineering, and Public Policy (COSEPUP; 2005-2007).
- Member, CMU Institute for Complex Engineered Systems (ICES) Advisory board (2004-2006)
- Member, Manufacturing Engineering Laboratory of the National Institute of Standards & Technology (NIST; 2004-2005)
- President, Association of Academic Women, University of California at Berkeley, 2002-2004.
- Associate Editor, *Artificial Intelligence in Engineering. Design, Analysis and Manufacturing,* (AIEDAM), Academic Press, Limited, Harcourt Brace Javanovich, Publishers
- Editorial Board, *Concurrent Engineering: Research and Applications* (CERA), Academic Press, Limited, Harcourt Brace Javanovich, Publishers
- Associate Editor, Design Engineering Education and the Green Design and Sustainable Engineering Education communities on the Engineering Pathway digital library
- Chair of the AAAS (American Association for the Advancement of Science) section on Engineering (Chair 2001-2002, Retiring Chair 2002-2003)

_____

- Member, MIT Corporation Visiting Committee in Mechanical Engineering (Presidential Nominee, 1999/2003)
- Member of the CMU Institute for Complex Engineered Systems (ICES) Advisory board. (Appointed by the President of CMU)
- Member of the Radcliffe Institute for Advanced Study. (Nominated by Dean of Engineering, Harvard University)
- Member of the Jet Propulsion Lab Advisory Board, 2002-2008
- Member, AAAS Committee on Opportunities in Science (1997-2003)
- Member, National Academy of Engineering (NAE), Committee on Engineering Education (1999-2002)
- Member, National Academy of Engineering (NAE), Bernard M. Gordon Prize for Innovation in Engineering and Technology Education (Gordon Prize) Committee, (2001-2002).
- Member, Advisory Board for the National Digital Library for Technological Literacy project, ITEA (2001-2002).
- International Co-Chair, 9th ISPE International Conference on Concurrent Engineering: Research and Applications (CE2002), Cranfield University, United Kingdom.
- Member, Executive Committee, Digital Media Innovation Initiative, University of California System (2000-2002).
- Member, ASEE Women and Minorities Task Force (2001/2002)
- Academic Advisory Board, 13th International conference on Engineering Design: Unifying Engineering Design — Building a Partnership Between Research and Industry, 21-25 August 2001, Glasgow, Scotland.
- Co-Chair, NAE Planning Committee on Engineering Education for the Year 2020 (1999-2000); Member, Engineer 2020 Committee (2004-2005).
- Member, NAE Committee on Technology Literacy Standards (1997-2000)
- Elected as Member-at-Large of the AAAS section on Engineering (1996-2000)
- Member, National Academy of Engineering, Academic Advisory Board (1998-99)
- Member, Addison Wesley Longman Higher Education Advisory Board, (1997-99)
- NSF SMETE-LIB (Science, Mathematics, Engineering, Technology Digital Library) Study Steering Committee (1997-98)
- Member, Guidance Committee, "Removing Barriers to Collaborative Research" project of the Government-University-Industry Roundtable of the National Research Council (1997-98)
- Member, ASEE, Wickenden Award Committee (1997-98)
- Member, Program Committee, ASME Design for Manufacture Conference (1997).
- NSF Advisory Committee for Engineering, Engineering Directorate, (1991-96, Chair 1996-97)
- Member, Faculty Advisory Committee, Boeing, Inc. (1996-98)
- Chair, NSF Proposal Review Advisory Team (1996-97)
- ASEE Fred Merryfield Design Award Committee (1993-96)
- Elected as Member of the Electorate Nominating Committee of the AAAS section on Engineering (1994-96); Chair (1995).

_____

- Participated in "Forum on Science in the National Interest: World Leadership in Basic Science, Mathematics and Engineering," Executive Office of the President, Office of Science and Technology Policy, Jan. 31-Feb. 1, 1994.
- Proposal reviewer for National Science Foundation (NSF), UC Microelectronics Innovation and Computer Research Opportunities (MICRO), Electric Power Research Institute (EPRI), Australian Science Fund, Canadian National Science and Engineering Research Council, and Swedish Council of Higher Education
- Reviewer for: *ASME Transactions, Journal of Optimization Theory and Applications, IEEE Transactions*, *IEEE Computer*, *AI in Engineering, Design, Analysis and Manufacturing, Research in Engineering Design, Journal of Intelligent Computing, ASEE Journal of Engineering Education, Engineering with Computers,* and *Advances in Engineering Software,* and numerous technical conferences
- Organizing committee member on a number of technical conferences and workshops
- Invited to provide testimony to Congress with talk titled: "Integrating Design and Manufacturing Education within Broader Societal Goals," Testimony to the House of Representatives, Committee on Science, Space, and Technology, May 12, 1992
- Invited to speak before the President's Council of Advisors on Science and Technology with talk titled: "Integrating Science and Technology Education and Research," University of California at Berkeley, July 15, 1992
- Invited speaker or chair of numerous panels at technical conferences
- Director (1983-1984) and Chair (1981-1982), ASME Santa Clara Valley Section
- Vice President, Society of Women Engineers, San Francisco Bay Area Section (1979-1980)

ADMINISTRATIVE ROLES

- Director, BEST Lab (1986-present) (Berkeley Expert Systems Technology / Berkeley Energy and Sustainable Technologies / Berkeley Emergent Space Tensegrities) Lab.
- Education Director (2017-2022), Blum Center for Developing Economies.
- Chair (2015-2022, Faculty Group in Development Engineering, Designated Emphasis (Ph.D. minor).
- Chair (2005-06)/ Vice Chair (2004-05), Berkeley Division, Academic Senate (100% administrative appointment as Chair; 50% as Vice Chair).The Chair of the Division presides at meetings of the Division and the Divisional Council. Serves, *ex officio*, as a member of the Assembly of the Academic Senate and on the Systemwide Academic Council, and as Chair of the Divisional Committee on Assembly Representation. Refers matters to the officers or agencies of the Division and of the Administration, as appropriate. Chair of the Systemwide Academic Council Working Group on the California Teach Initiative. Meets regularly with the Chancellor and Executive Vice Chancellor and Provost. At UC Berkeley, joins the Council of Deans and other executive committee meetings, as appropriate. Supervises staff of the Berkeley Division of the Academic Senate. Sits, without vote, in deliberations of any committee of the Division. Berkeley Division Senate Committees are: Academic Freedom (ACFR), Academic Planning & Resource Allocation (CAPRA), Admissions, Enrollment & Preparatory Education (AEPE), American Cultures Breadth Requirement (AM CULT), Assembly Representation (AREP), Budget & Interdepartmental Relations (BIR), Committee on Committees (COMS), Computing & Communications (COMP), Courses of Instruction (COCI), Divisional Council (DIVCO), Educational Policy (CEP), Faculty Awards (FA), Faculty Rep to the ASUC (FREP), Faculty Research Lecture (FRL), Graduate Council (GC), International Education (IE), Library (LIBR), Memorial Resolutions (CMR), Ombudsperson for Faculty (OMB), Panel of Counselors (POC), Privilege & Tenure (P&T), Prizes (PRIZ), Protection of Human Subjects (CPHS), Research (COR), Rules and Elections (R&E), Student Diversity and Academic Development (SDAD), Status of Women & Ethnic Minorities (SWEM), Student Affairs (STA), Teaching (COT), Undergraduate Scholarship & Honors (CUSH), University-Emeriti Relations (UER), University Extension (UEXT), Faculty Welfare (FWEL). Operating budget was approximately $3.9M.
- Co-Chair Steering Committee (2006), Working Group (2005), Berkeley Diversity Research Initiative. The initial priority of the BDRI is to strengthen the campus's research agenda on racial and ethnic diversity. Specifically, we wish to support research that will have a large impact on the ways in which multi-ethnic and multi-racial communities-at the local, state, national and international levels-can flourish as inclusive societies. Eventually, the initiative may encompass other research issues related to diversity. Formed in Spring 2006, the BDRI Steering

_____

Committee is charged with guiding the faculty FTE process, speaker series and developing a sustainable organizational structure.

- Co-Chair University Athletics Board, University of California at Berkeley (2005-6). The board has been charged with advising the Chancellor on all matters of policy related to Intercollegiate Athletics, with particular reference to the academic and personal well-being of student athletes and the accountability of the Athletic Department to the educational values and goals of the Berkeley Campus.) The board reports to the Chancellor, University of California at Berkeley.
- Chair, SESAME (Studies in Engineering, Science and Mathematics Education) Graduate Group, 2003-04. Chair of the Graduate Group in Science ad Mathematics Education (SESAME) chairs the SESAME Executive Committee with responsibilities for graduate admissions, awarding of fellowships, monitoring student progress, curriculum offerings, preliminary and qualifying exams. SESAME offers a graduate program leading to a doctoral degree in science, mathematics, or engineering education. The program is designed to produce graduates who have advanced expertise in a scientific discipline as well as in educational theory and research methodologies. It produces scholars who can communicate well with scientists and engineers as well as with educational researchers and practitioners. The program includes studies that connect human development, cognitive science, and educational technology with the learning of science, mathematics, and engineering.
- President, Association of Academic Women (AAW) at UC Berkeley, 2001-03. Campus organization that amplifies the voice of women faculty and academic associates.
- Faculty Assistant to Executive Vice Chancellor & Provost, Educational Development and Technology (100% administrative appointment; 1999-2001).Provided support to EVC&P Paul Gray in instructional technology, undergraduate education, WASC accreditation, and K-12 Outreach. Responsible for coordinating these activities with Chancellor's Cabinet, Council of Deans, Vice Chancellors' Academic Council, Academic Senate, Associate Vice Chancellor of Information Services & Technology and University Librarian. Co-Chair the E-Berkeley Implementation Task Force (1999/01), working with the Administrative and Student Services Computing Subcommittee (ASSCS), the Instructional Technology Subcommittee (IT) and the Information Technology Architecture Task Force (ITATF), to ensure as broad a range of representation as possible as they address policy concerns, guide the development of key projects, and maximize collaboration and resource sharing across the campus concerning enterprise-wide integration of internet services and technologies. Developed the CyberCentral virtual center (http://cybercentral.berkeley.edu) to assist faculty find resources for teaching, learning and educational technology. CyberCentral is organized around key areas of: pedagogy, course web sites, multimedia, classroom technology, intellectual property, recognition awards, grants, training, seminars, and evaluation. Created the Federation of Educational Technology Leaders to coordinate the following units: Berkeley Language Center, Center for Studies in Higher Education, GSI Teaching and Resource Center, Instructional Technology Program, IS&T Microcomputer Facilities, Office of Educational

_____

Development, Office of Media Services, Media Resource Center, Multimedia Research Center, Residence Hall Computing, School of Information Management and Systems, and the Teaching Library. Working with the Federation, CCCPB-IT Committee, CUE (Commission on Undergraduate Education), and Academic Senate, developed proposal for a Center for Teaching, Learning and Technology to improve teaching effectiveness and student learning and to promote innovations in the creative and effective use of both new and traditional educational methods, tools, and technologies.

- Director, Instructional Technology Program (1999-2001).Managed personnel, budget and programmatic needs of the Instructional Technology Program. ITP offers seminars, training workshops, consulting, and web-based courseware development services to faculty and their graduate student assistants. ITP provides the online information, training workshops, consulting services, computer resources, and software tools instructors need to establish their course newsgroups, e-mail lists, and web sites. ITP helps faculty create course web accounts and also supports faculty use of online course management tools such as WebCT and CourseInfo.

- Chair, Instructional Technology Committee of the Campus Computing and Communication Policy Board (CCCPB-IT) (1997/01), Co-Chair (1993/97).The CCCPB established the Instructional Technology Committee in September 1994 to provide guidance on instructional technology policy. The CCCPB-IT developed and implemented a four-tier architecture for course websites (1998-2000). Developed Information Literacy Expectations for Effective Use of Instructional Technology (1997-98). In coordination with the Divisional Council of the U.C. Berkeley Academic Senate, the CCCPB-IT conducted a survey of faculty needs regarding instructional technology in the spring of 1998. Initiated CyberSemester '97, a theme semester built around computation and the Internet in 1996/97. CCCPB-IT reports include:
    - Improving Instructional Technology at the University of California at Berkeley: Components of a New Initiative, Report to the University of California Office of the President, Oct. 18, 1996.
    - Steps Toward Becoming a Technologically Wise University, Strategic Planning for Technology's Use In Instruction at the University of California, Berkeley Aug. 25, 1996.
    - Instructional Technology at the University of California at Berkeley, Final Report of a Panel Chartered by the Academic Planning Board, April 27, 1994.

- Associate Dean, Instructional Technology/ Distance Learning, College of Engineering (1996/99; 25% administrative appointment)Managed personnel, budget and programmatic needs of instructional technology and distance learning in the College of Engineering. Responsible for management of the BITS and Cal VIEW programs. The Berkeley Instructional Technology Studio (BITS) provides support for faculty in the College of Engineering. The Televised Instruction Program at the University of California at Berkeley – known as Cal VIEW – Video Instruction for the Engineering World – supports Berkeley's activity as a member school in the National Technological University, NTU, which is a

_____

consortium of 51 universities and colleges. UC Berkeley participates as a member school of NTU by videotaping select engineering courses each semester and sending copies of those videotapes to Ft. Collins, Colorado for NTU to offer over a satellite broadcast system. Operating budget approximately $400K per year.

- Associate Dean, College of Engineering, Special Programs (1995/99; 25% administrative appointment).Managed personnel, budget and programmatic needs of the College's Center for Underrepresented Engineering Students (CUES). CUES is the umbrella for MESA (Mathematics, Engineering, Science, Achievement Program), MEP (Multicultural Engineering Program), JMEP (Julia Morgan Engineering Program), GrAD (Graduate Academic Diversity) Program, and SUPERB (Summer Undergraduate Program of Engineering Research at Berkeley). Work with student organizations, submit and manage research proposals, and represent the College on affirmative action issues. Serve as faculty representative for the Coalition for Diversity and Excellence in Math, Science and Engineering. Operating budget $1-2M per year, plus extracurricular grants.

- Director, Synthesis Coalition, an NSF Coalition for Undergraduate Engineering Education Coalition, 1994/97.Managed personnel, budget and programmatic needs of the Synthesis Coalition. Responsible for coordinating strategic planning and implementation efforts with over 200 faculty and administrators in the eight institutions of Synthesis: California Polytechnic State University at San Luis Obispo, Cornell, Hampton, Iowa State, Southern, Stanford, and Tuskegee Universities, and the University of California at Berkeley. Synthesis Coalition members were well-represented among the nation's leading institutions: three of the schools were in the top 10% of institutions in number of bachelor's degrees granted; three were in the top 10% for degrees granted to women; five for degrees granted to African-Americans; and four for degrees granted to Chicano/Hispanics. Synthesis produced computer-based instructional material that integrates the diverse analytic, design, experimental and intuitive skills that are required by a practicing engineer. Synthesis developed and continues to manage the National Engineering Education Delivery System (NEEDS). Operating budget approximately $2M per year with matching funds from industry.

- Director, Curriculum Reform, Synthesis Coalition (1990-94).Responsible for coordinating strategic planning, budgeting, fund raising and implementation of Synthesis undergraduate curricular reform efforts. Synthesis developed new curricular and pedagogical models that emphasized multidisciplinary content, teamwork and communication, hands-on and laboratory experiences, open-ended problem formulation and solving, and examples of "best practices" from industry. The two major interdisciplinary theme areas were: (1) Mechatronics and (2) Architecture/Engineering/Construction. K-12 linkages were built on Synthesis information infrastructures and curricular modules. Synthesis was funded for $15M during its first five years from the National Science Foundation and raised approximately $10M from industry.

UNIVERSITY SERVICE

ACADEMIC SENATE

- Member, Working Group, Lighting the Way to the Public Research University of the Future, Signature Initiatives #6. Served as Academic Senate member (2019-20)
- Member, Review committee for the design of the Center for Connected Learning (2020)
- Chair of the Faculty, College of Engineering, (2015-16); Secretary (2014-15); Acting Secretary (Fall 2011)
- Chair, Senate Athletics Council on Intercollegiate Athletics, Berkeley Division, Academic Senate (2013-2014)
- Member, Committee on Rules and Elections (2007-12)
- Chair, Berkeley Division, Academic Senate (2005-06); Vice Chair (2004-05)
- Elected to Committee on Committees (COMS) (2004), Berkeley Division, Academic Senate, stepped down in order to serve as Vice-Chair of the Berkeley Division of the Academic Senate.
- Co-Chair (with Vice Provost Christina Maslach), University Athletics Board (2005-06)
- Co-Chair (with Executive Dean George Breslauer), Diversity Research Initiative Working Group (2005-06)
- Member, Senior Advisory Group on Diversity & Inclusion (SAGDI) (Fall 2005)
- Co-Chair (with Vice Provost Catherine Koshland), Professional Degree Fee Working Group (2004-05)
- Member, Southeast Quadrant Working Group (2004-06)
- Mentor, Regents' and Chancellor's Scholarship awardee, Academic Senate Committee on Undergraduate Scholarships and Honors (CUSH)
- Member, Committee on the Status of Women and Ethnic Minorities (SWEM) (2003-2004)
- Interviewer, Regents' and Chancellor's Scholarship applicants for the Academic Senate Committee on Undergraduate Scholarships and Honors (CUSH)
- Co-Chair (with Associate Vice Chancellor of IS&T, Jack McCredie), Academic Planning Board (APB) Task Force on Instructional Technology (1993/95)
- UCB Academic Senate, Chair (1993/95), Computing and Communications Committee (Member, 1991/93)

ADMINISTRATIVE COMMITTEES, UC OFFICE OF THE PRESIDENT

- Member, UC Berkeley-Chile (CONICYT) Seed Fund Competition (2013)
- Member, Review Committee, President's Postdoctoral Fellowships (2009-10)
- Member, Review Committee, University of California's Canada-California Strategic Innovation Partnership (2010)

_____

- Member, Search Committee for the Chancellor of the University of California at San Francisco, (Chair, President Yudof), UC Office of the President (2009)
- Chair, Science and Mathematics Initiative Working Group, Academic Council (2005/2006); Member, Steering Committee, Science and Math Initiative, Office of the President (2004/05)
- Member, Academic Council (2005/2006), Academic Assembly (2005/2006); UC Office of the President
- Member, University-wide Advisory Committee to the Sloan-funded initiative "Developing a family Friendly Package for Ladder-Rank Faculty at the University of California" (2004-2006). This project led to a number of policy changes, including the 2006 Revised Academic Personnel Policies Related to Work and Family. Also see: UC's Family Friendly Policies for Faculty and Other Academic Appointees.
- Academic Planning Board, Office of the President, under Provost Jud King (2000/2001).
- Advisory Committee, NEXUS project, under Vice President Karl Pister. (1999/2000).
- Served on UCOP steering committee for the *All University Conference on Teaching and Learning Technologies and the Future of the University* (1996/97). Gave one presentation and coordinated a three-way broadcast over Internet between Chancellor Tien on the UCB campus, President Wang of Tsingua University in Beijing, China and the participants of the All-University conference at UCLA.
- Member, CINITAP (Committee on Intercampus Networking and Information Technology for Academic Purposes, 1994-97)

ADMINISTRATIVE COMMITTEES, UNIVERSITY LEVEL

- Chair, search committee faculty director search for the Blum Center for Developing Economies for the Office of the VC for Research, Fall 2021.
- Education Director, Blum Center for Developing Economies (2016-2022)
- Chair, Development Engineering Graduate Group (2016-2022)
- Member, Faculty Advisor Group at SkyDeck Accelerator (2020+)
- Member, Executive Committee, Energy Resources Group (2010-2013)
- Affiliated Faculty, Li Ka Shing Gender & Science Program, a research program that supports conferences, lectures and collaboration across fields to address issues related to gender, science and technology (2012-2013)
- Member, Advisory Committee for the Cal Preparatory School (2009-)
- Member, Advisory Committee for the Advisory Committee of the Center for Race and Gender (2009-)
- Chair, SESAME (Studies in Engineering, Science and Mathematics Education) Graduate Group (2003-04)
- Member, Executive Committee, SESAME (Studies in Engineering, Science and Mathematics Education) Graduate Group (1999-)
- Member, Chancellor's Task Force on Outreach Activities, 2004

_____

- Co-Chair, (with Assoc. Vice Chancellor James Hyatt), E-Business Implementation Task Force (2000)
- Member, Chancellor's Task Force on the Recruitment and Retention of Women and Underrepresented Minority Faculty.
- Chair, Instructional Technology Committee of the Campus Computing and Communication Policy Board (1997/2000), Co-Chair (1993/97)
- Member, Chancellor's Commission on Undergraduate Education (CUE), (1998/2000)
- Member, Chancellor's Advisory Policy Committee on Outreach (CAPCO), (1998/2000)
- Member, Faculty Advisory Committee on the Interactive University project, Chaired by TVC&P Carol Christ (1997/2003)
- Member, Service-Learning Faculty Policy Committee (1998-2005)
- Member, Advisory Board, Chaired by Ralph Hexter, Berkeley Language Center (1999/2001)
- Member, Advisory Board, Chaired by Nick Jewell, Geographical Information Sciences Center (1999/2000)
- Co-Chair, Chancellor's Committee on the Status of Women (2000/2001)
- Member, Advisory Committee for the Berkeley Multimedia Research Center (1997/99)
- Member, Lawrence Hall of Science Advisory Committee (1997/99)
- Member, Committee on Microcomputing under Vice-Chancelor Hardyck (1988/89)
- Served on ad hoc review committees for tenure and promotion cases

ADMINISTRATIVE COMMITTEES, COLLEGE OF ENGINEERING

- Faculty Director's Council, Jacobs Institute of Design Innovation, (2015-2022)
- MEng Faculty Advisory Committee (2015-2019), Fung Institute of Engineering Leadership.
- Art, Technology and Culture Committee (2009-17)
- Member, Design Innovation Task Force on the Jacobs' Institute of Design Innovation (2013-14)
- Member, Committee on Instructional Technology & Distance Learning (2009-13)
- Member, Common First Year Committee (2009-13)
- Member, Ad hoc Committee for SUPERB (Summer Undergraduate Program of Engineering Research at Berkeley), (1997/01)
- Member, Ad hoc Committee for Affirmative Action, (1997/99)
- Member, Ad hoc Interdisciplinary Committee for Management of Technology, (1994/2005)
- Member, Ad hoc Committee for Instructional Technology and Televised Instruction, (1988/99)
- Member, Ad hoc Committee on Student Relations (1988-91)
- Member, Ad hoc Committee for Robotics and Manufacturing (1990-91)

_____

- Member, Ad hoc Committee on Knowledge Engineering in the Undergraduate Curriculum (19987-88)
- Bioengineering Graduate Group (1990-91)

ADMINISTRATIVE COMMITTEES, DEPARTMENT OF MECHANICAL ENGINEERING

- Member, Committee on Faculty Awards (2017-2021)
- Faculty Advisor, UC Berkeley Section of Pi Tau Sigma (Mechanical Engineering Honor Society) (2016-2018)
- Member, Chair's Advisory Committee (Fall, Spring 2016-2020)
- Member, Department's Standing Search Committee (Fall, Spring 2016)
- Committee on ABET and Undergraduate Study, (Spring 2013-Spring 2015)
- Committee on Master of Engineering, Lead Advisor and Founder of Product Design Concentration (Spring 2013-)
- Undergraduate Advising, (every semester, except on sabbatical)
- Chair, Preliminary Exams, (Fall 2009-Spring 2011); Member (2016-17)
- Member, Drake Scholarships, (Fall 2006, 2009-12)
- Member, Preliminary Exams, (Fall 2006)
- Chair, Committee on Seminars, (2002/04)
- Chair, Committee on Industrial & Alunmi Relations- MEIA, (2002/05)
- Chair, Committee on Awards, (2002/05)
- Committee on Curriculum Review/Undergraduate Study, (2002/04)
- Committee on Graduate Study, (1998/99; 2002/04)
- Committee on Preliminary Exams, (1998/99)
- Committee on Internet Publications, (1997/98)
- Committee on Graduate Council Program Review, (1997/98)
- Committee on Faculty Affirmative Action (1987/95); Chair (1994-95)
- Member, Committee on Computers and Computation (1988-89)
- Chair, Ad hoc Committee on the Design Program (1988-89)
- Drake Scholarship Committee (1987/91)
- Committee on Undergraduate Advising (1987/91)
- Served on six faculty search committees

WOMEN AND MINORITIES RECRUITMENT/RETENTION

- Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine," Panel on the State of Women in Engineering 2018, Society of Women Engineers Annual Meeting.
- Co-authored "Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine," (National Academies' Committee: Paula Johnson, Sheila Widnall, Alice Agogino, Nicholas Arnold, Gilda Barabino, Kathryn Clancy, Lilia Cortina, Amy Dodrill, Lisa Garcia Bedolla, Liza Gold, Melvin Greer, Linda Gundersen, Elizabeth Hillman, Timothy

_____

Johnson, Anna Kirkland, Ed Lazowska, Vicki Magley, Roberta Marinelli, Constance Morella, John Pryor, Billy Williams, Frazier Benya), National Academies Press, 2018.

- Ran interactive session on"Entrepreneurial Mindset", (with Ilya V. Avdeev and Leticia Britos Cavagnaro), 2016 Symposium: 21st Century Mindsets and Strategies for Career Advancement, Minority Faculty Development Workshop (MFDW16), UC Berkeley, Sep. 23, 2016.
- UC Berkeley sponsor and speaker for Black Girls Code, December 13, 2014.
- Affiliated Faculty, Li Ka Shing Gender & Science Program, a research program that supports conferences, lectures and collaboration across fields to address issues related to gender, science and technology.
- Won AAAS Lifetime Mentor Award, 2012. Citation: for efforts to significantly increase the number of women and African- and Hispanic-American doctorates in mechanical engineering.
- Panel Speaker, Society of Women Engineers New Admit Overnight Program, Fall 2011.
- Berkeley PI, Broadening Participation in Computing grant, NSF: www.bpcportal.org, 2007-2012.
- Berkeley PI, NSF-Funded National Center for Women (NCWIT): www.ncwit.org, 2005-2012.
- Member, Advisory Committee, University-wide Advisory Committee to the Sloan-funded initiative "Developing a family Friendly Package for Ladder-Rank Faculty at the University of California", 2004-06. Became key component of UC's Family Edge policies.
- Mentor, Sponsored SUPERB (Summer Undergraduate Program of Engineering Research at Berkeley) students for diverse undergraduate research, 2004-present.
- Mentor, NERDS (New Experiences for Research & Diversity in Science) students for diverse undergraduate research, 2004-present.
- Co-Chair (with Executive Dean George Breslauer), Diversity Research Initiative Working Group, 2005-06. Co-Chair BDRI Steering Committee (Spring, Summer 2006). "Academic leadership welcomes research proposals from all disciplines to advance this crucial institutional effort. "Last week a working group led by Professors Alice Agogino and George Breslauer . . . began to craft procedural recommendations for the research initiative, setting the stage for what is hoped will be a prompt call for proposed topics of study, followed by the first new hires, possibly as early as this fall. The campus might decide to apply research expertise to health disparities, educational opportunity and achievement, the impact of the criminal-justice system on diverse communities, or political participation and citizenship – to name just a few examples. But work proposed by experts in many other, less-obvious fields – from life sciences to engineering to art practice – will also be welcomed into the research initiative's "big tent." Mechanical engineering's Agogino, for example, would like to see the campus undertake research on bridging the digital divide." *The Berkeleyan*, May 4, 2005.

_____

- Co-Instructor of Berkeley's Research in Diversity and Inclusion: A Multi-disciplinary Survey Seminar, Spring 2006, with Evelyn Nakano Glenn, Director of the Center for Race and Gender.
- Chancellor's Award for Advancing Institutional Excellence, 2006. The new award recognizes faculty providing leadership in research, education and public service in building an equitable and diverse learning environment. My work was described as "an extraordinary blend of research in mechanical engineering, inquiry into issues of gender and minority access and equity and the building of programs, resources and curricula to advance both causes."
- Serve on the Women in Academic Science Engineering Committee of the National Academies Committee on Science, Engineering, and Public Policy (COSEPUP; 2005-2006). The committee was chaired by Donna Shalala, President of the University of Miami. The charge was to develop a report on maximizing the potential of women in academic science and engineering, including findings and recommendations for recruiting, hiring, promoting, and retaining women scientists and engineers. The committee focused on academe but also examined other research sectors for examples of effective practices. The report provided specific action points for the following groups: faculty, department chairs and deans, academic leaders, funding organizations, and government officials. The study was rolled out in two phases. Phase One was an NIH-sponsored convocation (open to the public), held in 2005, that reviewed current research on gender issues in science and engineering, including a discussion of the nature-nurture debate on cognitive development, as well as implicit bias and faculty diversity research. A workshop proceedings was published shortly following the event. The final report – Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering – received national attention and considerable press coverage.
- Developed diversity theme pages for the NEEDS (National Engineering Education Digital-library System): Celebrating African American Engineers and Gender Equity.
- Developed a new course module called "Community-Based Design" in E10 (Introduction to Engineering Design and Analysis) that was designed to attract underrepresented engineering students as well as students interested in the positive impact that technology can have on society. Students in this module go through a human-centered design process in which they co-participate with target community members to develop technological solutions to critical socio-technical problems. During the Spring 2005 semester the focus was on reducing toxins and toxic substances for low income rural agricultural workers in California. Students had the opportunity to present the results of their work at an international conference on design. This module benefitted from collaboration with the Engineers for a Sustainable World, Anita Borg Institute for Women and Technology, the California College of Arts and the P & G industry sponsor. Website: http://best.me.berkeley.edu/%7Eaagogino/e10_agogino.htm
- Developed a new course (with Prof. Jennifer Mankof in Computer Science) called "Designing Technology for Girls and Women" that was co-listed with Womens

_____

Studies with a grant from the Anita Borg Institute of Women and Technology. Website: http://best.me.berkeley.edu/%7Eaagogino/e39d/index.html

- Co-PI on successful proposal submitted to NSF titled "The Berkeley Edge: Advancing Minorities through the Ph.D. and Beyond," for $2,500,000 over five years. (1999/2005)
- Served on the American Association for the Advancement of Science (AAAS) Committee for Opportunities in Science, a committee meeting twice a year to promote science and engineering careers to women, underrepresented minorities and persons with disabilities. (1997-2003)
- PI for Engineering Information Fund "Interactive Theater" grant to sensitive faculty to gender/racial issues in our teaching and learning climate. (1998-2000)
- Co-authored (with Prof. James Casey) a successful NSF grant to fund 9 bioengineering students each year for 5 years in SUPERB (Summer Undergraduate Program of Engineering Research at Berkeley). The proposal was targeted to underrepresented engineering students. The Summer of 1999 was the first year of the grant.
- Supported initiative with the National Academy of Engineering and the American Society of Engineering Education to conduct a retention study of women and minority faculty in Engineering Colleges.
- Keynote speaker at the UC Berkeley student chapter of the Society of Women Engineers' Evening with Industry dinner, Nov. 19, 1999, Berkeley, CA. Title: "Teaching, Learning and Libraries on Internet Time."
- Participated on the faculty panel and the engineering break-out sessions for targeted minority recruitment receptions: 1998-99.
- Coordinated the "Engineering Woman to Women" session at Cal Day '99.
- Completed an analysis of SAT scores and graduating GPA for students in our Minority Engineering Program (now called "Multicultural Engineering Program) and presented results: "Post-Proposition 209: Admissions, Outreach and Student Services for Underrepresented Engineering Students", Engineering Advisory Board meeting, May 19, 1998. Also presented at the Berkeley Engineering Fund, Board of Directors, June 3, 1998.
- Invited speaker for NACME (National Action Council for Minorities in Engineering). "The Synthesis Coalition's Assessment Strategy", NACME Forum '97: Crisis and Commitment – Engineering Strikes Back, Seattle, WA., Oct. 3, 1997.
- Keynote speaker at the Third Annual California McNair Scholars Symposium, Aug. 10-12, 1995. The McNair Scholars program encourages underrepresented minorities and first-generation college students to participate in undergraduate research and prepare for graduate education.
- Keynote speaker at the Society of Women Engineers' Evening with Industry program, Nov. 17, 1995.

_____

SERVICE TO ELEMENTARY AND/OR SECONDARY EDUCATIONAL INSTITUTIONS

- "Tensegrity Robots with BEST Robotics", Summer Fun Weeks, Lawrence Hall of Science, Aug. 3 2016.
- Member, Executive Committee of Graduate Group in Studies in Engineering, Science and Mathematics Education (SESAME).
- Member, Advisory Committee, Cal Prep, 2008-2012
- Member, Advisory Board, <href=http: howtosmile.org="">Science and Math Informal Educators (SMILE), Lawrence Hall of Science, 2008-2011
- Reviewer, and Secondary Education Program, National Aeronautics and Space Administration (NASA), 2007-2008
- Chair, Systemwide Academic Council Working Group on the California Teach Initiative. (2005/06)
- Member, Science and Math Initiative, Office of the President;. (2004/05).
- PI, Engineering Pathway, a portal to high-quality teaching and learning resources in applied science and math, engineering, computer science/information technology and engineering technology, for use by K-12 and university educators and students. You are entering the engineering "wing" of the National Science Digital Library (NSDL); $2.9M, NSF.
- PI, "Ubiquitous Digital Library Infrastructure to Support Mobile Learning", UC Discovery Grants (with industry co-sponsors HP and Ricoh International)
- PI on subcontract with the Exploratorium on the NSF grant "Exploratorium Online: Exhibit-based Science Learning and Teaching Digital Library".
- Served on the Golden Apple Fellowship Selection Committee (2000). This is a collaboration between UC Berkeley, the San Francisco Unified School District and the San Francisco Education Fund. (1999-2000)
- Served as the UC Berkeley Liaison for the UC Nexus Advisory Committee (1999-2000). UC Nexus is a statewide University of California initiative carried out by the UC Office of the President to explore the effective uses of computer and Internet technologies for K-12 education by building on and extending curriculum development and student assessment, and distance learning tools and strategies.
- Served on the National Academy of Engineering's study of K-12 Technology Literacy Standards. (1997-2000)
- Completed an Interactive University Project titled: "Interactive MESA". The IU MESA Day Competition was held on April 4, 1998 and written up in the *Engineering News:* http://www.coe.berkeley.edu/cues/news/mesaday98.html.
- Initiated the process through CAPCO (Chancellor's Advisory Policy Committee on Outreach) and helped write a campus proposal to Siemens to sponsor the Western Region Siemens-Westinghouse Science and Technology Competition at approximately $100,000. The Berkeley funds were used to bring in targeted underrepresented students to the Berkeley campus and interact with the Siemens-Westinghouse Science and Technology Competition. The award was submitted by Vice Chancellor Genaro Padilla and was administered by the Coalition for Excellence and Diversity in Mathematics, Science and Engineering

_____

Education. The Pacific Region competition was held on Nov. 5&6, 1999 and was viewed as quite a success with approximately 200 local students and advisors attending. All of the Siemens-Westinghouse competitors from California said that they would apply to UC Berkeley. Caroline Kane, Chair of the Coalition, took the lead in organizing the activities. Prof. Roger Falcone, Chair of Physics, was the lead judge for the competition. Agogino served as the judge representing Engineering.

- Primary author and PI on proposal submitted to NSF titled "GK-12: NSF Graduate Teaching Fellows in K-12 Education" for $1,463,856. In this proposal, Graduate Teaching Fellows would work in K-12 partnerships aimed at (a) creating curriculum materials that increase scientific and mathematical understanding, (b) enabling schools to use technology to promote fluency for all students, (c) developing effective professional development activities aligned with curriculum improvement, and (d) providing role models and mentors for students. Proposal was not awarded but new K-12 partnerships were established. (1999)
- Presented invited talk titled "Multimedia and Internet Enabling New Modes of Learning in K-14" at the UCB Colloquium on Using the Internet for Instruction and Outreach, January 14, 1997.
  http://www1.needs.org/~agogino/IU/IU.presentation_ToC.html
- Provided workshops and hands-on exercises for the K-12 programs of the Santa Clara Valley Section of the Society of Women Engineers (SWE). Served as judge to the K-12 "Junior Solar Sprint Challenge," with the Society of Women Engineers and the Lawrence Hall of Science, May 25, 1996.
- Served as: (1) member, Lawrence Hall of Science Advisory Council; (2) member, Faculty Advisory Committee for the Interactive University Project; (3) member, Chancellor's Advisory Policy Committee on Outreach (CAPCO), (4) member, Service Learning Advisory Committee.
- Supervised PhD students in the SESAME (Studies in Engineering, Science, Mathematics Education program, with a focus on K-12.
- Participated in a number of K-12 projects through the MESA (Mathematics * Engineering * Science Education) program.

PUBLIC OR COMMUNITY SERVICE

- Faculty sponsor, Present Around the World Competition at UC Berkeley (2016-2017).
- "Tensegrity Robots with BEST Robotics", Summer Fun Weeks, Lawrence Hall of Science, Aug. 3 2016.
- Provided Tensegrity Robot Demo, NASA Ames Research Center 75th Anniversary Open House, Oct. 18, 2014.
- Awardee and Keynote Speaker at Assemblymember Nancy Skinner STEM Women of the Year, 2014.
- Founder of the Engineering Pathway digital library in engineering education. Although NSF funding has ended, I continue to lead its operations and development as a service to the nation. Editor-in-Chief, Today in History Blog,

_____

Engineering Pathway. (2005-13). Continue as Co-Founder and PI for theDesignExchange.
- Worked with the Pinoleville Pomo Nation (PPN) to co-design culturally-sensitive sustainable housing on their reservation near Ukiah (2005-present). Co-sponsored international design competition for the PPN's vision of a Living Culture Center (2011-12). See: http://2012.participlace.org/. Won Chancellor's Award for Public Service in 2010 for the CARES (Community Assessment for Renewable Energy and Sustainability) project.
- Gave numerous talks on National Academy reports:
    - Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering
    - Educating the Engineer of 2020: Adapting Engineering Education to the New Century
    - The Engineer of 2020: Visions of Engineering in the New Century
- Participated in many design for development projects and pesticide protection for farm workers.
- Provided numerous talks representing UC Berkeley, including an invited presentation to the UC Regents, "Multimedia Case Studies to Teach Engineering Design/ Digital Library of Engineering Courseware," Oct. 19, 1995.

_____

TEACHING AND MENTORING AWARDS

- **Athena Award for Academic** Leadership and contributions to diversity, Center for Information Technology in the Interest of Society, 2020.
- Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring, 2018.
- **ASME Design Theory and Methodology Award**: *to recognize sustained and meritorious contributions to research; education; service; training of researchers or practitioners; overall leadership in advancing the field; or any combination of these in the field of Design Theory and Methodology*, 2017.
- **ASME Ruth and Joel Spira Outstanding Design Educator Award** f*or tireless efforts in furthering engineering design education including curriculum changes that blend cutting-edge design topics with state-of-the-art educational practices; promoting wide-ranging interaction between industry and students; performing game-changing design research; and mentoring the next generation of designers, educators, researchers and engineers*, 2015.
- **Lifetime Mentor Award**, AAAS, 2012. Citation: *for efforts to significantly increase the number of women and African- and Hispanic-American doctorates in mechanical engineering.*
- **Professor of the Year,** UC Berkeley Pi Tau Sigma, 2011. Citation: *demonstrated time and again her commitment to high academic standards and improving the undergraduate experience for Mechanical Engineering students.*
- **Faculty Award for Excellence in Graduate Student Mentoring,** Mechanical Engineering Graduate Student Council, 2007.
- **Chancellor's Award for Advancing Institutional Excellence**, 2006. The new award recognizes faculty providing leadership in research, education and public service in building an equitable and diverse learning environment. Citation: *an extraordinary blend of research in mechanical engineering, inquiry into issues of gender and minority access and equity and the building of programs, resources and curricula to advance both causes.*
- **NSF Director's Award for Distinguished Teaching Scholars**, 2004. This award was considered "the foundation's highest honor for integrated teaching and research excellence".
- **IEEE Helen Plants Award for "Best Non-Traditional Session** at Frontiers in Education", 1998, American Association for Engineering Education.
- **Best Overall Paper Award**, 1998 (with Ann McKenna). Annual Conference of the American Association for Engineering Education.
- **Best Paper Award** (with Ann McKenna), 1997. ASEE/IEEE Frontiers in Engineering Education Conference.
- **John Wiley & Sons Premier Courseware Award** (with D. Yu) for "Virtual Disk Drive Design Studio" CD ROM, 1997.
- **Ralph R. Teetor Educator Award**, Society of Automotive Engineers, 1987.
- **Award for Excellence in Teaching**, 1986, Pi Tau Sigma, UC Berkeley.

_____

PH.D. STUDENTS

1.	1988/89	Pramod Jain	"A Vector Quantization Multistart Method for Global Optimization"
2.	1989/90	Fariborz Nadi	"Modeling of Complex Manufacturing Processes via Integration of Influence Diagrams and Neural Networks"
3.	1989/90	Robert K. Paasch	"Management of Uncertainty in Sensor Based Diagnostic Expert Systems"
4.	1989/90	Jonathan Cagan	"Innovative Design of Mechanical Structures from First Principles"
5.	1990/91	Ming-Lei Tseng	"Integrating Neural Networks with Influence Diagrams for Multiple Sensor Diagnostic Systems"
6.	1990/91	Nestor Michelena	"Monotonic Influence Diagrams; Application to Optimal and Robust Design"
7.	1991/92	Jean-Michel Nataf	"Equation-based Automatic Modeling Applied to Thermal Systems"
8.	1991/92	Young-Jin Kim	"Uncertainty Propagation in Intelligent Sensor Validation"
9.	1991/92	Eric Schendel, M.D.	"Cascading Synthetic Node Inference: Cascading Bayesian Inference Employing Synthetic Intermediate Nodes" (Bioengineering)
10.	1993/94	Stephen R. Bradley	"Design Optimization under Resource Constraints"
11.	1993/94	Cassandra T. Rogers	"Expert Systems Approach to Regional Evaluation of Debris Flow Hazard" (Co-chaired with Nicholas Sitar), Engineering Science – Civil Engineering
12.	1995/96	William H. Wood III	"Supplying Concurrent Engineering Information to the Designer: The Conceptual Design Information Server"
13.	1995/96	Satnam S. Alag	"A Bayesian Decision- Theoretical Framework for Real-Time Monitoring and Diagnosis of Complex Systems: Theory and Application" Abstract
14.	1995/96	Kai Goebel	"Management of Uncertainty in Monitoring and Diagnosis of Mechanical Systems Using Fuzzy Techniques" Abstract
15.	1996/97	Sherry Hsi	"Facilitating Knowledge Integration in Science through Electronic Discussion: the Multimedia Forum Kiosk"
16.	1996/97	Balaguruna (Bala) Chidambaram	"Catalog-Based Customization" Abstract

_____

17.	1996/97	Andy Dong	"The Management of Design Information: A Decision-Analytic Approach" Abstract
18.	1997/98	Anil Varma	"Intelligent Distributed Design Systems: A Machine-Learning Approach"
19.	2000/2001	Xio-Ping (Susan) Su	"Compliant-Leverage Mechanism Design for MEMS Applications"
20.	2001/2002	Ann McKenna	"Designing Instruction to Support Mechanical Reasoning: Three Alternatives in the Simple Machines Learning Environment" Abstract
21.	2001/2002	Jiangxin Wang	"Equipment and Process Modeling and Diagnostics in Semiconductor Manufacturing" Dissertation (1.9 mb)
22.	2001/2002	Ning-Ning Zhou	"Simulation and Synthesis of MicroElectroMechanical Systems (MEMS)" Abstract
23.	2004/2005	Shuang Song	"Shared Understanding and Information Seeking, Sharing and Sketching in the New Product Design Process"
24.	2004/2005	Raffi Kamalian	"Evolutionary Synthesis of MEMS Devices"
25.	2004/2005	Jia-Long Wu	"Unified Language System for Engineering Design (ULSED): A Framework and Automation Tools for Better Design Information Retrieval"
26.	2005/2006	Ying Zhang	"MEMS Design Synthesis Based on Hybrid Evolutionary Computation"
27.	2006/2007	Jessica Granderson	"Human-centered Sensor-based Bayesian Control: Increased energy efficiency and user satisfaction in commercial lighting"
28.	2007/2008	Jonothan Henry Grenville Hey	"Effective Framing in Design"; Thesis Seminar slides.
29.	2007/2008	Corie Lynn Cobb	"Case-based Reasoning for MEMS Design Synthesis"
30.	2008/2009	Yao-Jung Wen	"Wireless Sensor and Actuator Networks for Lighting Energy Efficiency and User Satisfaction"
31.	2008/2009	Jaspal Sandhu	"Serial Hanging Out in Mongolia: Information, Design and Global Health"
32.	2009/2010	Catherine Newman	"Information Scaffolding: Applications to Technical Animation"
33.	2012/2013	Celeste Roschuni	"Communication in the Design Process: Applying Human-Centered Design Tactics"
34.	2012/2013	Lora Oehlberg	"Information Sharing Tools for Collaborative Human-Centered Design Teams"

_____

35.	2012/2013	Yael Valerie Perez	"Global Architects Meet the Place – Bridging the Gap through Information and Communication Technology", Co-advised with Prof. Yehuda Kalay (Architecture), Spring 2013
36.	2012/2013	Ryan Shelby	"Co-Designing Sustainable Communities: The Identification and Incorporation of Social Performance Metrics in Native American Sustainable Housing and Renewable Energy System Design", Spring 2013
37.	2012/2013	Sohyeong Kim	"Open Innovation Ecosystem: Chez Panisse Case Study," Summer 2013
38.	2012/2013	Anna Pereira	"Computer Input Devices: Design for Well-Being and Productivity," Co-advised with Prof. David M. Rempel (UCB School of Public Health; UC San Francisco Medical School), Summer 2013
39.	2013/2014	Jennifer Wang	"Engineering Learning: Cross-Community Design, Development, and Implementation of Engineering Design Challenges at a Science Center", Spring 2014
40.	2013/2014	Sara Samiphak	"Liver Fluke Infection and Fish Consumption in Khon Kaen, Thailand: A Case Study on Negotiating the Middle Ground between Eastern & Western Medicine", Co-advised with S. Leonard Syme (UCB School of Public Health), Spring 2014
41.	2013/2014	Mark Fuge	"Collaborative Design Informatics: Leveraging Big Data to Create Better Designs", Summer 2014
42.	2014/2015	Kimberly Lau	"Diversity in Design Teams: An Investigation of Learning Styles and their Impact on Team Performance and Innovation", Summer 2015
43.	2014/2015	Omoju Miller	"HipHopathy, A Socio-Curricular Study of Introductory Computer Science", Fall 2015
44.	2015/2016	Jessica Vechakul	"Human-Centered Design for Social Impact: Case Studies of IDEO.org and the International Development Design Summit", Spring 2016
45.	2015/2016	Daniel Wilson	"Quantifying the Crisis of Cooking: Next-Generation Monitoring and Evaluation of a Global Health and Environmental Disaster", Summer 2016
46.	2015/2016	Euiyoung Kim	"Design Roadmapping: Integrating Design Research Into Strategic Planning For New Product Development", Summer 2016
47.	2016/2017	Rong Lily Hu	"Machine Learning to Scale Fault Detection in Smart Energy Generation and Building Systems", Fall 2016
48.	2016/2017	Kyunam Kim	"On the Locomotion of Ball-Shaped Tensegrity Robots", Fall 2016

_____

49.	2016/2017	Lee-Huang Chen	"Soft Spherical Tensegrity Robot Design Using Rod-Centered Actuation and Control", Fall 2016
50.	2016/2017	Duncan W. Haldane (Co-Advised with Ronald S. Fearing, EECS)	"Rapid and Agile Locomotion with Power-dense Millirobots", Spring 2017
51.	2016/2017	Jeremy Faludi	"Golden Tools in Green Design: What drives sustainability, innovation, and value in green design methods?", Summer 2017
52.	2017/18	Vivek Rao	"Heating and Treating Water with Sunlight: Hybrid Solar Photocatalytic-Thermal Systems for a Sustainable Built Environment", Spring 2018
53.	2017/18	Jessica Lee	"Increased Millirobot Traction in Running and Jumping through Leg Spines", Spring 2018
54.	2017/18	Pierce Edward Cornelius Gordon	"Investigating Innovation Practice: Cross-Disciplinary Studies in International Development", Summer 2018
55.	2017/18	Julien Caubel	"Solving the Air Pollution Crisis: Mitigation and Monitoring", (with Ashok Gadgil), Fall 2018
56.	2018/19	Sonia Travaglini	"Mycelium Materials", Spring 2019
57.	2018/19	Andrew Preston Sabelhaus	"Tensegrity Spines for Quadruped Robots", Summer 2019
58.	2019/20	Jianlan Luo	"Efficient Robotic Skill Learning", Spring 2020
59.	2019/20	Brian Cera	"Design, Control, and Motion Planning of Cable-Driven Flexible Tensegrity Robots", Summer 2020
60.	2019/20	Julia Kramer	"Design for Accessibility: Applications of Human-Centered Design to Improve Access to Cervical Cancer Screening", Summer 2020
61.	2020/21	Thomás Georgiou	"Development of Upper Limb Assistive Devices and a Variable Stiffness Mechanism for Potential Use in Prosthetics and Orthosis", Fall 2020
62.	2021/22	Andrew Barkan	Physical Human-Robot Interaction in Spherical Tensegrity Robots, UC Berkeley"
63.	2021/22	Alan Zhang	"Design of Impact-Resistant Tensegrity Landers"
64.	2021/22	George Edward Moore II	"Sustainable and Inclusive Design Thinking"
65.	2022/23	Deniz E. Dogruer	"Social-Impact Driven Experiential Learning: Student Motivations, Goals and Perceived Value"

_____

PH.D. STUDENTS, 2ND OR 3RD READER

1987/88	Gaetano Borriello	"Reasoning about Circuit Interfaces and the Automatic Synthesis of Interface Transducers"
1987/88	Perry Lee McCarty, Jr.	"The Management of Uncertainties in Expert Systems"
1987/88	Eric Bier	"Snap Dragging: Interactive Geometric Design in Two and Three Dimension"
1988/89	Dave W. Halligan	"Managing and Documenting Unforeseen Site Conditions using Influence Diagrams"
1988/89	Dartikeya Mayaraman	"CODECS: A Mixed-Level Circuit and Device Simulator"
1989/90	Lung Albert Chen	"Knowledge-Based Retrieval of Information as a Process of Evidential Reasoning"
1989/90	Woo-Tsong Linn	"An Object-Oriented System for Knowledge-Based Production Scheduling"
1990/91	Gary S. May	"Automated Malfunction Diagnosis of Integrated Circuit Manufacturing Equipment"
1991/92	Marie Ellen desJardins	"A Model for Autonomous Learning in Probabilistic Domains"
1992/93	Shlomo Zilberstein	"Operational Rationality through Compilation of Anytime Algorithms"
1992/93	Luis Miguel Bozzo Rotondo	"Qualitative Reasoning about Structural Behavior for Conceptual Design"
1992/93	Adeel Najmi	"Management of Cycle Time in Semiconductor Wafer Fabrication"
1993/94	Cassandra T. Rogers	"Expert Systems Approach to Regional Evaluation of Debris Flow Hazards"
1994/95	Sovarong Leang	"A Control and Diagnostic System for the Photolithography Process Sequence"
1994/95	Asoke Kumar De	"Modeling and Optimization of Fine Grinding of Minerals in High-Pressure Roll Mill – Ball Mill Hybrid Communication Circuits"
1994/95	Brian C. Smith	"Implementation Techniques for Continuous Media Systems and Applications"
1995/96	Nestor V. Queipo	"On the Optimal Placement of Heat Sources in an Enclosure Based on Adaptive Search and Machine Learning"
1995/96	Vikram Vij	"Exploiting Parallelism in a Shared Disk Database System"

1996/97	Gitanjali Swamy	"Incremental Methods for Formal Verification and Logic Synthesis"
1996/97	Stephen Anthony Edwards	"The Specification and Execution of Heterogeneous Synchronous Reactive Systems"
1997/98	Peter Neuhaus	"Industrial Strength Human-Assisted Walking Robots"
1998/99	Brian M. Dennis	"CrossJam: A Language for Hypermedia Authoring"
1999/2000	Dawn Rickey	" The Role of Metacognition in Learning Chemistry, "
1999/2000	Jeanna Neefe Matthews	"Improving File System Performance with Adaptive Methods"
1999/2000	Adrian J. Isles	" Formal Verification Using Datapath Abstraction"
1999/2000	Blas Guerrero	"An Analysis of Academic Demographic and Non-Cognitive Factors that Influence Academic Performance During the Freshman Year in College"
2000/01	Douglas Clark Burton	"Scaffolding Knowledge Integration Through Curricular Depth"
2002/03	Hesham Mohamed Kamel	"The Integrated Communication 2 Draw"
2002/03	Zu-Hsu Lee	"Design and Analysis of Algorithms for Due Date Quotation"
2003/04	Michael Wetter	"Simulation-Based Building Energy Optimization" (pdf)
2004/05	Rodney Martin	"Optimal Prediction, Alarm, and Control in Buildings Using Thermal Sensation Complaints"
2004/05	Lixia Zhou	"Optical MEMS for Free-Space Communication"
2005/06	Pam Sirivedhin Ridgely	"A Method for Dynamic Modeling and Simulation of FlexibleBeams"
2006/07	Colin Thomas Milberg	"Application of Tolerance Management to Civil Systems"
2006/07	Jaewook Lee	"Design Collaboration as a Framework for Building Intelligent Environments"
2006/07	Youngung Shon	"Development and Evaluation of a Haptic Rendering System for Virtual Design Environments"
2006/07	Nathan Ken Ota	"The Application of Wireless Sensor Networks to Residential Energy Efficiency and Demand Response"
2007/08	Debbie Gahaton Jones	"Line-of-Sight Sealed Silicon Carbide Diaphrams for Harsh Environment Sensors"
2007/08	Priya Sreedharan	"Bayesian based design of real-time sensor systems for high-risk indoor contaminants"

_____

2008/09	Xue Chen	"Demand Response-enabled Autonomous Control for Interior Space Conditioning in Residential Buildings"
2008/09	Tye Lawrence Rattenbury	"An Activity Based Approach to Context-Aware Computing"
2008/09	Stan Tuholski	"Transformation, Flow, and Value Constellations in AEC Projects"
2009/10	Florent Heidet	"Maximum Fuel Utilization in Advanced Fast Reactors without Actinides Separation"
2009/10	Corinne Reich-Weiser	"Decision-Making to Reduce Manufacturing Greenhouse Gas Emissions"
2010/11	Jessica Louis Baker Rivest	"Nanocrystal Photovoltaics: The Case of Cu2S-CdS"
2011/12	Johanna L. Mathieu	"Modeling, Analysis, and Control of Demand Response Resources"
2011/12	Isaac Liu	"Precision Timed Machines"
2012/13	Nancy Diaz-Elsayed	"The Development of Energy Models for Production Systems and Processes to Inform Environmentally Benign Decision-Making", Spring 2013
2012/13	Fatima Allyne	"Precipitation Effects in Ion Implanted Aluminum Nitride," Summer 2013
2013/14	Stefanie Lynn Robinson	"An Environmental and Economic Trade-off Analysis of Manufacturing Process Chains to Inform Decision Making for Sustainability," Fall 2013
2013/14	Sushrut S. Pavanaskar	"Improving Energy Efficiency in CNC Machining," Spring 2014
2013/14	Paz Arroyo	"Exploring Decision-Making Methods For Sustainable Design In Commercial Buildings," Spring 2014
2015/16	Pablo J. Rosado	"Evaluating Cool Impervious Surfaces: Application to an Energy-Efficient Residential Roof and to City Pavements," Spring 2016
2016/17	William A. Tarpeh	"Designing and Evaluating Novel Approaches to Nitrogen Recovery from Source-Separated Urine," Summer 2017
2017/18	Youngwook Paul Kwon	"Automated Registration of Image Pairs with Dramatically Inconsistent Appearance," Fall 2017
2018/19	Bourne, Hannah	"Marine Biogeochemical Cycling of Carbon and Cadmium," Fall 2018
2018/19	Victor Eduardo Villalobos Daniel	"Innovation in Public Health: a behavioral and design sciences approach," Fall 2018

2022/23	Dana A. Hernandez	"Development and Deployment of Novel Arsenic Remediation Technologies in the Contexts of Rural India and the Central Valley of California"
2022/23	Areidy A. Beltran-Pena	"Evaluating Climate Change Impacts on Water Resources and Food Systems – A Global Perspective with Insights from Africa and California"
2022/23	Paige Balcom	"Analysis of Uganda's Plastic Waste Challenge from an Exergy, Thermal Phase Change, and Development Perspective to Improve Resource Efficiency and Social Impact"
2022/23	Casey Finnerty	"Developing Interfacial Solar Vapor Generation into a Sustainable Desalination Technology"
2022/23	Samantha N. Hing	"Cleaner Cooking: Exploring Tools to Measure and Understand the Long-term Adoption and Environmental Significance of Cookstoves in India"

MS THESES/PROJECTS

1.	1984/85	Timothy M. Hayes, MS Plan II	"Human Factors Display Design for a Multi-Channel Radiation Monitor"
2.	1984/85	Stephen H. Grau, MS Plan II	"The Conceptual Design of a Distributed Digital Control Network for Nuclear Power Plant Control"
3.	1985/86	Eric A. Moore, MS Plan II	"INFORM: A Knowledge Acquisition and Modeling Interface for IDES, the Influence Diagram based Expert System"
4.	1985/86	Steven L. Ethier, MS Plan II	"A Human Factors Study of the Primary Operating Displays for the NUSC Automatic Top Control Unit"
5.	1985/86	Johnston Choy, MS Plan II	"Automating SYmbolic MONotonicity Analysis"
6.	1985/86	Ron Heglie, MS Plan II	"DASCON: The Data, Acquisition Configuration System"
7.	1986/87	Kenneth M. Schneider, MS Plan II	"Real Time Control with Influence Diagram based Expert System"
8.	1986/87	Mark K. Lambert, MS Plan I	"A Graphical Interface to an Influence Diagram based Expert System"
9.	1986/87	Ann S. Almgren, MS Plan II	"Symbolic Computation for Constrained Optimization in Computer-Aided Design"
10.	1986/87	Nestor F. Michelena, Master of Engrg	"Multiobjective Hydraulic Cylinder Design"
11.	1986/87	Kristofer A. Swanson, MS Plan II	"CVAID Expert System Development"
12.	1987/88	Lt. Leonard S. Kim, MS Plan II	"Influence Diagram and Ada based Expert System"
13.	1987/88	Jean-Michel Nataf	"Automatic Modeling of Thermal Systems"
14.	1987/88	Ramanathan Guha, MS Plan II	"Induction and Analogy for Engineering Expert Systems"
15.	1987/88	Ashutosh Rege, MS Plan I	"On the Theory and Automation of Influence Diagrams: Consistency, Modeling and Implementation"
16.	1987/88	Sampath Srinivas, MS Plan II	"Inducing Influence Diagrams from Examples"
17.	1987/88	Sherry Hsi, MS Plan II	"ADIS: Assistive Device Interface Selector for the Disabled"

18.	1987/88	Michael J. Molezzi, MS Plan II	"Computer Workstation Design for Disabled Users: A Study of the Design Process"
19.	1988/89	Ramachandran Gurumoorthy, MS Plan II	"Annotated Prolog in a Distributed Environment"
20.	1988/89	Audumbar Padgaonkar, MS Plan II	"Monitoring System for the Time-of-Flight Wall at LBL"
21.	1989/90	Rhonda S. Stieber, MS Plan II	"An Expert System Advisor for Configuring Information Display Systems"
22.	1989/90	Sandra L. Turner, MS Plan II	"Preliminary Analysis of the Application of Expert Systems to Fire Detection in Structures"
23.	1990/91	Christopher Johnson, MS Plan II	"Version Control & Temporal Enhancements to DesignSCRIBE: An Information System for Concurrent Design"
24.	1991/92	Kathy Naassan, MS Plan II	"Sensor Validation for the Space Shuttle Main Engine Controller"
25.	1991/92	Keith Allan Gallion, MS Plan I	"RMS – Repair Management System: A System to Aid in the Diagnosis of Ship Structural Failures and the Evaluation of Repair Alternatives"
26.	1991/92	Regina S. Narkiewicz, MS Plan II	"Tem Pump Performance Model"
27.	1992/93	Jay Evans, MS Plan II	"Multimedia Case Studies for Teaching Best Design Practices"
28.	1992/93	Punit Jain, MS Plan II	"Intelligent Sensor Validation for Diagnostic Expert System: Integrating Algorithmic and Heuristic Processing"
29.	1992/93	James Osborn, MS Plan II	"Development of Display Object: An Interactive Educational Spatial Reasoning Tool"
30.	1992/93	Ian Zook, MS Plan II	"Using Multimedia Case Studies in Engineering: Knowledge Acquisition During Case Study Development"
31.	1992/93	Antonio Hernandez, MS Plan II	"The Identification of Successful Strategies for Spatial Reasoning"
32.	1993/94	Charles M. Carlstrom, MS Plan II	"Development, Testing, and Assessment of the Cyclone Grinder Multimedia Case Study"
33.	1993/94	Andy Dong, MS Plan II	"Design Wizard: Tools for Computer-Assisted Prototype Selection"

_____

34.	1993/94	Todd Forsyth, MS Plan II	"A Report on the Structure and Operation of the Controlled Ecological Life Support Visual Database Project"
35.	1993/94	Nagaraj Srinivasan, MS Plan II	"Multimedia Case Studies in Engineering: Development and Assessment of the Disk Drive Case Study"
36.	1993/94	Kai Goebel, MS Plan II	"Using a Neural-Fuzzy Scheme to Diagnose Manufacturing Processes"
37.	1993/94	Pranjali Dattada, MS Plan II	"User Study for a Networked Multimedia Database of Courseware"
38.	1993/94	Stacey Au, MS Plan II	"A Multimedia Archival System for Explosively Actuated Valves: A Study in Design Archival"
39.	1994/95	Sunny Gill, MS Plan II	"The Best Practices Document: Recommendations for Using Instructional Technology for Delivery of Courseware"
40.	1994/95	Nanette Nalzaro, MS Plan II	"GE Multimedia Acquisition System (GEMMAcs): A Presentation Database; A Study in Document Information Archival"
41.	1994/95	Stephen Bayne, MS Plan II	"Capturing Design Experience with a Low Cost Database for Design Component Standardization"
42.	1995/96	Zhijie Huang, MS Plan II	"An Electronic Product Catalog"
43.	1995/96	Mitchell Suarez, MS Plan II	"Neural Network Terminal Area Aircraft Trajectory Conflict "
44.	1995/96	Shad H. Shokralla, MS Plan II	"21st Century Jet: The Boeing 777 Multimedia Case Study"
45.	1995/96	David W. Bellm, MS Plan II	"Characterization of the Sonar and Radar Distance Sensing Devices under Suboptimal Operating Conditions for the California Partners for Advanced Transit and Highways"
46.	1995/96	Robert Stanard, MS Plan II	"People, Products and Process: Interactive Multimedia Case Study in Integrated Design, Manufacturing Strategy and New Product Development"
47.	1996/97	Jorge Enrique Barreto, MS Plan II	"Augmenting Information Retrieval Using EVPI Computation"
48.	1996/97	David Yu, MS Plan II	"The Virtual Disk Drive Design Studio"
49.	1996/97	Bradly Cammon, MS Plan II	"Integration of Sensor Validation and Fusion Techniques with SmartPath: A Process and Performance Evaluation"
50.	1997/98	Ya Wen, MS Plan II	"People, Products and Strategies: The Design and Development of a Web-based Multimedia Case Study"

_____

51.	1997/98	Jiangxin Wang, MS Plan II	"Sensor Validation and Fusion of GPS Aided Longitudinal Positioning System for IVHS"
52.	1998/99	Youhao Jing, MS Plan II	"MESANet: Facilitating MESA Design with Internet and a WWW-based Learning Environment"
53.	1998/99	Rebecca F. RichkusMS Plan II	"Web Implementation and Enhancement of the Virtual Disk Drive Design Studio," Netscape Version and Internet Explorer Version
54.	1998/99	Aparoopa (Tina) Dutta, MS Plan II	"Geographically-Independent Learning: Built & Designed for ME290P"
55.	1999/2000	Jason Puzniak, MS Plan II	"The Role of On-Line Communication and Community in a Digital Library for Science, Mathematics, Engineering, and Technology Education"
56.	2001/2002	Andrew Hill, MS Plan II	"Creating Online Faculty Collaboration to Develop Engineering Education Computer Learning Materials"
57.	2001/2002	Jessica Granderson, MS Plan II	"Development of an On-Line Design Guide for Cal MESA's (Mathematics, Engineering and Science Achievement) BEST (Boosting Engineering Through Science and Technology Robotics Competitions"
58.	2002/2003	Rebekah Yozdell-Epstein, MS Plan II	"Economic, Energy and User Needs Analysis of an Intelligent Lighting System"
59.	2003/2004	Matthew Dubberly, MS Plan II	"Life Cycle Assessment of an Intelligent Lighting System using a Distributed Mote Network"
60.	2003/2004	Hengsi Lin, MS Plan II	"A Protocol for Evaluating Designers' Sketching Activities"
61.	2003/2004	Mohammad Rasheq Zarif, MS Plan II	"Categorization of Current MEMS Suspension Design Variants"
62.	2004/2005	Yao-Jung Wen, MS Plan II	"Smart Dust Sensor Mote Characterization, Validation, Fusion and Actuation
63.	2004/2005	Julien Sauvageon, MS Plan II	"Integrated Systems Health Monitoring Using Smart Dust Mote Sensor Networks: Hot Spot and Peak Strain Detection in Space Vehicles"
64.	2004/2005	Vinukumar Ranganathan, MS Plan II	"Locking-free Curved Beam Finite Element formulation And its application in MEMS Resonators "
65.	2004/2005	Marisela Avalos, MS Plan II	"Technology Assessment of Implantable Cardioverter Defibrillator Batteries"
66.	2005/2006	Lionel Mohri, MS Plan II	"The Design Process through the Eyes of a Berkeley Student"

67.	2005/2006	Fabian Beltran, MS Plan II	"Human Preference Testing for Smart Lighting"
68.	2006/2007	Esha Datta, MS Plan II	"Mobile Learning and Digital Libraries: Designing for Pre-Engineering Education at the Elementary School Level "
69.	2007/2008	Stephanie Lynn Robinson, MS Plan II	"A Usability Assessment of the Engineering Pathway Educational Digital Library"
70.	2007/2008	Jennifer Mangold, MS Plan II	"A User Needs Study of K-12 Teachers for the Engineering Pathway Educational Digital Library"
71.	2007/2008	Andrew Favor, MS Plan II	"Exploring a Publisher Funded Business Model by Using Engineering Pathway as a Content Platform"
72.	2007/2008	Ryan Shelby, MS Plan II	"Thermal Endurance and Cryogenic Capable Pressure Vessel Design for a (L)H2 Fueled Toyota Prius"
73.	2007/2008	Lora Oehlberg, MS Plan II	"Tangible and Digital Media in Design Journals: Medium's Influence on Sketching Behavior"
74.	2007/2008	Kimberly Lau, MS Plan II	"Sketching Behavior and Design Journals"
75.	2007/2008	Rupam Singla, MS Plan II	"Designing a Suit to Protect Migrant Farm Workers in California from Pesticide Exposure"
76.	2007/2008	James T. Bonnell, MS Plan II	"Green Lighting: Wireless Lighting Systems Integration for Significant Energy Savings"
77.	2008/2009	Timothy Robert Jacobi, MS Plan II	"A Product Development Case Study in the Amusement Industry"
78.	2008/2009	Johanna Louise Mathieu, MS Plan II	"Design of a Rural Water Provision System to Decrease Arsenic Exposure in Bangladesh" (with Ashok Gadgil)
79.	2008/2009	Nick Adrian Galano, MS Plan II	"Smart Lighting: LED Implementation and Ambient Communication Applications"
80.	2008/2009	Celeste Roschuni, MS Plan II	"Relationship Conflict And Feeling Communication In Design Teams"
81.	2009/2010	Kayvan Nowrouzi, MS Plan II	"Node Weight Modeling for Optimal Routing: The Mobile Millennium Project" (with Alexandre Bayen)
82.	2011/2012	Jennifer Wang, MS Plan I Thesis	"Engineering Learning at a Science Center" (with Lisa Pruitt and Marcia Linn)
83.	2011/2012	Ryan Paulson, MS Plan II	"Personalized Illuminance Model Using Inverse Modeling and Piecewise Linear Regression"
84.	2012/2013	Daniel Wilson, MS Plan II	"Life Cycle Assessment Shows Carbon Savings from a Fuel-Efficient Biomass Cookstove Dwarf Embodied Carbon Emissions"

_____

85.	2012/2013	Vivek Mohan Rao, MS Plan II	"Building Facades for Solar Water Treatment: Design and Characterization of a Vertically-Integrated Multistep (VIMS) Solar Photocatalytic Water Treatment Reactor"
86.	2012/2013	Qi Hongo, MS Plan II	"Sustainability Guidelines for Early Product Development: Focus on Hot Water Kettles and Florescent Lights"
87.	2012/2013	Hanxin Shen, MS Plan II	"Sustainability Guidelines for Early Product Development: Focus on Office Seating and Childhood Furniture"
88.	2012/2013	Rui Guo, MS Plan II	"Sustainability Guidelines for Early Product Development: Focus on Cell Phones"
89.	2012/2013	Guang Zhu, MS Plan II	"Sustainability Guidelines for Packaging"
90.	2012/2013	Min Zhu, MS Plan II	"Sustainability Guidelines for Early Product Development: Focus on Jeans and Footwear"
91.	2012/2013	Chaten Boscha, MS Plan II (Co-Chair)	"Samsung Capstone Project: Assessing Risks and Opportunities of Introducing a Controversial/Unconventional Technology within an Existing Framework"
92.	2013/2014	Dizhou Lu, MS Plan II	"Structural Design for Tensegrity Mechatronics"
93.	2013/2014	Justino J. Calangi, MS Plan II	"Model-Based Control System for Packing a 6-Bar Tensegrity Structure"
94.	2013/2014	Eric Cheng-yu Hong, MS Plan II	"Viability of Tensegrity Robots in Space Exploration"
95.	2013/2014	Yuejia (Margaret) Liu, MS Plan II	"Tensegrity Soft Robot for NASA Mission"
96.	2013/2014	Yangxin Chen, MS Plan II	"Structure and Actuation Design of a 6-Rod Tensegrity Robot"
97.	2013/2014	Greg Quan, MS Plan II	"New Mobility Solutions for a Changing Automotive Landscape: Development of a Shared Transportation Web Platform"
98.	2013/2014	Saddiq Nuru, MS Plan II	"Identifying Opportunity Spaces in the Car/Ride Sharing Environment: Creating a Framework for a Suburban Community Circulator"
99.	2013/2014	Weishi Wu, MS Plan II	"Residential Mobility Solution and Life-Cycle Assessment of Community Carsharing"
100.	2013/2014	Rahul Mehendiratta, MS Plan II	"Residential Mobility Solution and Life-Cycle Assessment of Community Carsharing"

_____

101.	2013/2014	Aadityeshwar Saran Singh Deo, MS Plan II	"Mercedes-Benz Residential Mobility Service: Framework to Evaluate the Change in Greenhouse Gas Emissions"
102.	2013/2014	Andrew Kam, MS Plan II	"Collaborative Workspace Design: Digital Device Design of Digital-Tangible Platforms"
103.	2013/2014	Joshua Harling, MS Plan II	"Collaborative Workspace Design: User-Experience Analysis of Digital-Tangible Platforms"
104.	2013/2014	Xueying (Cheryl) Hou, MS Plan II	"Collaborative Workspace Design: Sustainability Analysis of Digital-Tangible Platforms"
105.	2013/2014	Ellen Dong, MS Plan II	"Collaborative Workspace Design: Hardware Design Analysis of Digital-Tangible Platforms"
106.	2013/2014	Pierce Gordon, MS Plan II (Co-Chair with Dan Kammen)	"Design Thinking for the Poor: A Comparative Content Analysis of Development Challenges in OpenIDEO"
107.	Summer 2014	Rong Lily Hu, MS Plan II	"A Statistical Learning Approach for Detection of a Chiller Energy Efficiency Fault"
108.	Fall 2014	Hugo Wagoner, MS Plan II	"Open Innovation Business Models for the Development of a Tensegrity Toy Kit"
109.	Fall 2014	Jeffrey Lee, MS Plan II	"Pinoleville Pomo Nation Sustainable Home: A case study of energy modeling on sustainable design"
110.	Fall 2014	Andrew P. Sabelhaus, MS Plan II	"Mechanism and Sensor Design for SUPERball, a Cable-Driven Tensegrity Robot"
111.	Spring 2015	Jessica Lee, MS Plan II	"Anisotropic Collapsible Leg Spines for Increased Millirobot Traction"
112.	Spring 2015	Kathryn G. Van Lieshout, MS Plan II	"Environmental Impact and Indoor Quality Assessment of Pinoleville Pomo Nation Demonstration Home: An implementation of life cycle assessment and culturally inspired design"
113.	Spring 2015	Julien J. Caubel, MS Plan II	"A Low-Cost, Compact Low Carbon Sensor to Monitor Biomass Cookstove Emissions"
114.	Spring 2015	Colin Ho, MS Plan II	"A Haptic Display Using Interleaved Belts to Simulate Lateral and Rotational Slip"
115.	May 2015	Jonathan Chinen, MEng Plan II	"IoT and the Restorative Smart Office"
116.	May 2015	William J. Frese, MEng Plan II	"Design of a Bioreactive System for Emotionally Intelligent Internet of Things Environments"

_____

117.	May 2015	Lee Benjamin Hamstra, MEng Plan II	"Environmental Responses to Stress in the Office of the Future"
118.	May 2015	Daylun (Daniel) Lim, MEng Plan II	"Rapid Prototyping in UX Design Research for the Internet of Things"
119.	May 2015	Oscar Segovia, MEng Plan II	"Audio, IoT and the Advent of the Smart Office"
120.	May 2015	Dayana Hijaz, MEng Plan II	"Green Design Guide for Design Professionals"
121.	May 2015	Baris Ozgen, MEng Plan II	"Green Design Strategies for Consumer Electronics: Results and Case Studies from the Internet of Things"
122.	May 2015	Joey Le Zhang, MEng Plan II	"Green Design Guide for Design Professionals: Product Environmental Performance Study"
123.	May 2015	Yujiang Sun, MEng Plan II	"Green Design Guide for Design Professionals: UX design for green sustainability guide"
124.	May 2015	Patrick Bailey Hylton, MEng Plan II	"Mechatronics and Design of the Passive Compliance system of the ULTRA Spine, A Tensegrity Robot"
125.	May 2015	Yakshu Madaan, MEng Plan II	"Design and Prototypes of Structure and Guide Pulleys for ULTRA Spine – a tensegrity robot"
126.	May 2015	ChanWoo Yang, MEng Plan II	"Simulations and Dynamics Modeling for Tensegrity Soft Spine Robotics: ULTRA Spine"
127.	May 2015	Lim Yusheng Alexander, MEng Plan II	"Design of a New Spherical Tensegrity Robot Kit"
128.	May 2015	Azhar Khaderi, MEng Plan II	"Mechatronics and Control of a Spherical Tensegrity Robot Kit"
129.	May 2015	Peadar Keegan, MEng Plan II	"Electronics & Software Design of a Spherical Tensegrity Robot for NASA Missions"
130.	May 2015	Xiang Li, MEng Plan II	"A Study in Artificial Intelligence Methods for Spherical Tensegrity for NASA Missions"
131.	August 2015	Kyle Zampaglione, MS Plan II	"DNA-Structured Linear Actuator for Tensegrity Robots"
132.	May 2016	Nada Alameddine, MEng Plan II	"Samsung IOT: Hardware Design in a Children's Wearable Device"
133.	May 2016	Hyeji Kim, MEng Plan II	"Quantitative Analysis of User Experience Expectations on IoT Wearables: Computerized Clustering and Scenario-based Conjoint Analysis"

_____

134.	May 2016	Borna Dehghani, MEng Plan II	"Samsung IoT Wearable Product Development: Mechanical/Industrial Design and 3D Modeling"
135.	May 2016	Hyunil (Chester) Cho, MEng Plan II	"User Experience Design for IoT Wearable Device: Concept Visualization in Iterative Design Process"
136.	May 2016	Jessie Tung, MEng Plan II	"Manufacturing a Children's Wearable Device: Samsung IoT"
137.	May 2016	Miho Kitagawa, MS Plan II	"Qualitative Analysis of Design Training Programs Inspired by International Development Design Summit"
138.	May 2016	Yinglong Li, MEng Plan II	"Spherical Tensegrity Robot for NASA Missions: Mechanical Design and Manufacturing"
139.	May 2016	Yang Zheng, MEng Plan II	"Spherical Tensegrity Soft Robot for NASA Missions: Design of the Next Generation Tensegrity Robot"
140.	May 2016	Anupama Madiyan, MEng Plan II	"Gimbal Concept Design and End Cap Design for NASA Spherical Tensegrity Robot"
141.	May 2016	Borui Xia, MEng Plan II	"Spherical Tensegrity Robot for NASA: Mechanical Design"
142.	May 2016	Marcel Pozo, MEng Plan II	"GPS and Motion: For Spherical Tensegrity Robots"
143.	May 2016	Julien Despois, MEng Plan II	"Localization, Path Planning and Controls for Spherical Soft Tensegrity Robots in the context of NASA Space Missions"
144.	May 2016	Jeffrey L. Ware, MEng Plan II	"Spherical Tensegrity Soft Robots for NASA Missions: IMU Integration for Orientation Detection and System Drop Response"
145.	May 2016	Vincent Viola, MEng Plan II	"Simulation and Control of Spherical Tensegrity Robots for NASA Missions: Feasibility Analysis of a Cable Actuated Thruster System"
146.	May 2016	Chuanhai Zhu, MEng Plan II	"Repair Scorecard: Variable Selection, Data Collection and Data Analysis"
147.	May 2016	Boran Fu, MEng Plan II	"Repair Scorecard: Data Collection, Analysis and Algorithm Development"
148.	May 2016	Daqian Jiang, MEng Plan II	"Repair Scorecard: Qualitative Research"
149.	May 2016	Jack David Clark, MEng Plan II	"Designing, Fabricating and Testing an Oscillating Wind Power Device"
150.	May 2016	Shi Xuan "Shane" Koh, MEng Plan II	"Analytical Modelling of Mechanical Behavior for an Oscillating Wind Power Device"

_____

151.	May 2016	Feng "Karwin" Liu, MEng Plan II	"Designing an Alternative Wind Power Device with Power Output Estimation"
152.	May 2016	Hari Narayanan Soundararajan, MEng Plan II	"Design Considerations through Simulations for an Oscillating Wind Power Device"
153.	May 2016	Maya Mardini, MEng Plan II	"Oscillating Wind Power Generator: Design Influences from Stakeholders Competitors"
154.	May 2016	Yilian Yan, MS Plan II	"Simulation of Two-Dimensional Cable Actuated Thruster in Tensegrity Structure"
155.	May 2016	Julia Kramer, MS Plan II	"Human-Centered Design for Development: Characterizing the Research Landscape"
156.	May 2016	Angel Omar Sanchez-Torres, MS Plan II	"Design Thinking and Lean Start-ups"
157.	Dec 2016	Christopher A. Collins, MS Plan II	"The Alternative Iron: Designing a Low-Power Electric Clothing Iron for the Energy Poor"
158.	August 2017	Cera Brian, MS Plan II	"Control Applications for Mobility of Generalized Tensegrities"
159.	May 2017	Mallory Daly, MS Plan II	"Design and evaluation of 12-bar tensegrity robots for surface exploration missions"
160.	May 2017	Diego Rivas Costante, MEng Plan II	"Beyond Smartphones: "Flexible Electronics to Generate Haptic Feedback in Virtual Reality Environments"
161.	May 2017	Arielle Maxner, MEng Plan II	"Beyond Smartphones: Developing a Vibrotactile Haptic Language and Flexible Electronics Wearable for Virtual Reality Applications"
162.	May 2017	Kingston Xu, MEng Plan II	"Beyond Smartphones: "Designing a flexible haptic wearable and auxiliary language for virtual reality applications"
163.	May 2017	Juan Ordonez, MEng Plan II	"Design of 12-Bar Tensegrity Robots: Hardware Design, Actuation Analysis and Testing"
164.	May 2017	Zhangyou Nikki Chen, MEng Plan II	"Design of 12-Bar Tensegrity Robots: Electronic Design and Actuation Analysis"
165.	May 2017	Marshall Hoaglan, MEng Plan II	"Design of 12-Bar Tensegrity Robots: Impact Performance and Analysis"
166.	May 2017	Zhong Jin, MEng Plan II	"Design of 12-Bar Tensegrity Robots: IMU System Design and Impact Performance Record"
167.	May 2017	Eric Jiang, MEng Plan II	"Path Planning of Tensegrity Robots in NASA's Tensegrity Robotics Toolkit Simulator"

168.	May 2017	Carrina Dong, MEng Plan II	"Design of an Automated Testbed for a Six-Bar Tensegrity Robot"
169.	May 2017	Henry He Huang, MEng Plan II	"Design and Fabrication of Launch Testbed for 6-bar Tensegrity Robot"
170.	May 2017	Anosh Sethna, MEng Plan II	"6-Bar Tensegrity Robot Gimbaled Thruster Testbed – Design, Fabrication, and Preliminary Testing"
171.	May 2017	Michael Jei-Lin Wu, MEng Plan II	"Experimental Validation of Autonomous Navigation in Spherical Tensegrity Robots"
172.	May 2017	Shail Shah, MEng Plan II	"Beyond Smartphones: "Integration of Design with Technology-Driven Development of a Continuous Fetal Heart Rate Monitor"
173.	May 2017	Corey Long, MEng Plan II	"Beyond Smartphones: "Regulatory Pathway Considerations for a Fetal Heart Rate Monitor"
174.	May 2017	Kaiyue Wang, MEng Plan II	"GUI Design, prototyping and user test of continuous fetal monitoring device"
175.	May 2017	Asher Saghian, MEng Plan II	"Design and Evaluation of the Curved Rod and W-Cross Tensegrity Spines"
176.	May 2017	Shu Jun Tan, MEng Plan II	"Design, Prototype and Evaluation of the Under-Actuated Lightweight Tensegrity Robotic Assistive (ULTRA) Spine Robot: W-Extended, W-Alternating and X-Alternating Spines"
177.	May 2017	Robel Bahlbi Teweldebirhan, MEng Plan II	"Simulation and Performance Evaluation of Tensegrity Spine Designs"
178.	May 2017	Huajing (Shirley) Zhao, MEng Plan II	"Model-Predictive Control for Reduced-Error Trajectory Tracking of a 2D Simulated Tensegrity Spine Robot"
179.	May 2017	Lara Janse van Vuuren, MEng Plan II	"Design, Manufacturing, and Testing of an Actuated Leg for a Tensegrity Quadruped Robot"
180.	May 2017	Jacquelin Hansel, MEng Plan II	"Street Nature Score – Building a map-based web-application"
181.	May 2017	Siying Chen, MEng Plan II	"Street Nature Score: Visualization"
182.	May 2017	Pierre Fredenucci, MEng Plan II	"Street Nature Score: Product and Business Development"

_____

183.	May 2017	Tinashe Giyavha, MEng Plan II	"Street Nature Score: Technical Product Development – Calculating the nature scores"
184.	May 2017	Laura Sverchek, MEng Plan II	"Oscillating Wind Power: Design and Optimization of Sail Flipping Mechanism"
185.	May 2017	Saba Fazeli, MEng Plan II	"Oscillating Wind Power: Sail Design, Optimization, and Testing"
186.	May 2017	Patrick Hartmann, MEng Plan II	"Oscillating Wind Power: Design and Testing of Output Power Conversion"
187.	May 2017	Roberto Ortiz-Soto, MEng Plan II	"Oscillating Wind Power: Mechanical Power Transfer "
188.	December 2017	Elena Cristina Durán López, MS Plan II	"Geometris: Designing an Embodied and Collaborative Geometry Game and Understanding its User Interactions"
189.	December 2017	Edward Liu Zhu, MS Plan II	"Modeling of Uncertain Restitution Behavior in Path Planning for Tensegrity Robot Locomotion"
190.	May 2018	Danielle Poreh, MS Plan II	"Methods to Embed and Assess Context-Driven Design in Engineering Education"
191.	May 2018	Brian Cera, MS Plan II	"Aerial and Ground Locomotion with Six-Bar Spherical Tensegrities"
192.	May 2018	Alan Zhang, MS Plan II	"Design and Impact Characterization of Six-bar Spherical Tensegrity Robots"
193.	May 2018	Parissa Lotfi, MS Plan II	"Global Product Development Evaluation"
194.	December 2018	Paige Balcom, MS Plan II	"Trash to Tiles-Exploration of Creating Products from Waste Plastic in Uganda"
195.	December 2019	Jasmine M. Gipson, MS Plan II	"Methodology for Experimental Modal Analysis of 6-Bar Ball Tensegrity Structures"
196.	December 2019	George Moore, MS Plan II	"A Life Cycle Analysis of Laser Cutter Embodied Impacts"

_____

197.	May 2023	Ankita Joshi, MS Plan II	"Using Scenario-Based Design to Understand Bystanders' and Experts' Perceptions of Privacy Risks Emerging from the Cyber-Physical Social Systems of Autonomous Vehicles"

M.ENG OR M.DEVENG CAPSTONE PROJECTS

Student Name	Dissertation Title/Project	Completion Date
1. Michael Oudenhoven	Samsung's stretchable wearable technology.	2018
2. Ashis Ghosh	Samsung's stretchable wearable technology.	2018
3. Purva Juvekar	Samsung's stretchable wearable technology.	2018
4. Stephanie Cantu	Human-Centered Design – Renault: Creation of a Multi-Sensory Experience for Autonomous Vehicle Users	2018
5. Satish Kanagaraj	Human-Centered Design – Renault: Creation of a Multi-Sensory Experience for Autonomous Vehicle Users	2018
6. Etienne Marecal	Human-Centered Design – Renault: Creation of a Multi-Sensory Experience for Autonomous Vehicle Users	2018
7. Zareen Cheema	Tensegrity Spheres: A balancing act of robustness and compliance	2018
8. Stuart Sonatina	Tensegrity Spheres: A balancing act of robustness and compliance	2018
9. Jeff Ying	Tensegrity Spheres: A balancing act of robustness and compliance	2018
10. Jonathan Marr	Tensegrity Spine Quadrupedal Robot	2018
11. Nigel Mevana	Tensegrity Spine Quadrupedal Robot	2018
12. Holly Stein	Tensegrity Spine Quadrupedal Robot	2018
13. Aashish Bhardwaj	The Million Hands Platform	2018
14. Sina Dabiri	The Million Hands Platform	2018
15. Annie Lee	The Million Hands Platform	2018
16. Jacqueline Nguyen	The Million Hands Platform	2018
17. Jose Ramirez	The Million Hands Platform	2018
18. Aastha Shah	The Million Hands Platform	2018
19. Austin Campbell	Wind Power: Bird safe, quiet, attractive	2018
20. Ali Elashri	Wind Power: Bird safe, quiet, attractive	2018
21. Erica Horton	Wind Power: Bird safe, quiet, attractive	2018
22. Chahal Neema	Wind Power: Bird safe, quiet, attractive	2018
23. Mason Friedberg	M.Eng: Natural Disasters: A unique solution to disaster rescue and monitoring	2019

_____

24. Joshua Peterson	M.Eng: Natural Disasters: A unique solution to disaster rescue and monitoring	2019
25. Mrunal Sarvaiya	M.Eng: Natural Disasters: A unique solution to disaster rescue and monitoring	2019
26. Tianyi Chen	M.Eng: Natural Disasters: A unique solution to disaster rescue and monitoring	2019
27. Prasad Gaikwad	M.Eng: Mobile Robots for Disaster Rescue: Passive Robot Team	2019
28. Charlotte Chapellier	M.Eng: Mobile Robots for Disaster Rescue: Passive Robot Team	2019
29. Jovin Foo	M.Eng: Mobile Robots for Disaster Rescue: Passive Robot Team	2019
30. Zining Wang	M.Eng: Mobile Robots for Disaster Rescue: Passive Robot Team	2019
31. Aaron Ong (with Kosa Goucher-Lambert)	M.Eng: Human-Centered Design for Shared Autonomous Vehicles Mobility in a Dynamic Society	2019
32. Juaquin Troncoso with Kosa Goucher-Lambert)	M.Eng: Human-Centered Design for Shared Autonomous Vehicles Mobility in a Dynamic Society	2019
33. Arnold Yeung with Kosa Goucher-Lambert)	M.Eng: Human-Centered Design for Shared Autonomous Vehicles Mobility in a Dynamic Society	2019
34. Shreyas Bhayana	M.Eng: Reimaging Autonomous Driving Scenarios: Connected Sensors	2019
35. Zheng Sun	M.Eng: Reimaging Autonomous Driving Scenarios: Connected Sensors	2019
36. Hugues Vigner	M.Eng: Reimaging Autonomous Driving Scenarios: Connected Sensors	2019
37. Ziwei Zhang	M.Eng: Reimaging Autonomous Driving Scenarios: Connected Sensors	2019
38. Changhao Zheng	M.Eng: Reimaging Autonomous Driving Scenarios: Connected Sensors	2019
39. Jack Gibbons (with Phil Marcus)	M.Eng: Vertical Axis Wind Turbine	2019
40. Marina Rizk (with Phil Marcus)	M.Eng: Vertical Axis Wind Turbine	2019
41. Matthieu Meeus (with Phil Marcus)	M.Eng: Vertical Axis Wind Turbine	2019
42. Nicolas Leport (with Phil Marcus)	M.Eng: Vertical Axis Wind Turbine	2019
43. Harry Wang (with Phil Marcus)	M.Eng: Vertical Axis Wind Turbine	2019
44. David Asnaghi	M.Eng: Beyond Hands Prosthetic	2019
45. Lucie Derbier	M.Eng: Beyond Hands Prosthetic	2019
46. Elizabeth Gomes	M.Eng: Beyond Hands Prosthetic	2019
47. Alva Liang	M.Eng: Beyond Hands Prosthetic	2019
48. Pooja Rao	M.Eng: Beyond Hands Prosthetic	2019
49. Eliana Abbas	M.Eng: Squishy Robotics – Developing mobile tensegrity robots to assist emergency responders	2020
50. Aditya Vipin Thomas	M.Eng: Squishy Robotics – Developing mobile tensegrity robots to assist emergency responders	2020

_____

51. Shawn Marshall-Spitzbart	M.Eng: Squishy Robotics – Developing mobile tensegrity robots to assist emergency responders	2020
52. Abhishek Bhagwat	M.Eng: Squishy Robotics – Developing mobile tensegrity robots to assist emergency responders	2020
53. Wai Yan Nyein	M.Eng: Development of Rapidly Deployable Spherical Tensegrity Robots	2020
54. Anita Zhao	M. .Eng: Development of Rapidly Deployable Spherical Tensegrity Robots	2020
55. Varun Save	M. .Eng: Development of Rapidly Deployable Spherical Tensegrity Robots	2020
56. Mruthun Thirumalaisamy	M. .Eng: Development of Rapidly Deployable Spherical Tensegrity Robots	2020
57. Rebecca Schwartz	M.Eng: Squishy Robotics – Developing mobile tensegrity robots to assist emergency responders	2020
58. Jigisha Sampat	M.Eng: Development of Rapidly Deployable Spherical Tensegrity Robots	2020
59. Senthil Venkatachalam	M.Eng: Designing Data and Privacy Framework for Virtual Reality Cyber Experience	2020
60. Gauri Parkar	M.Eng: Designing Data and Privacy Framework for Virtual Reality Cyber Experience	2020
61. Celina Chow	M.Eng: Stationary Robot Product Design	2021
62. Tamara Perreault	M.Eng: Stationary Robot Product Design	2021
63. Daniel Newell	M.Eng: Mobile Robot Locomotion	2021
64. Mina Fanaian	M.Eng: Mobile Robot Locomotion	2021
65. Edward Xia	M. M.Eng: Drop Performance	2021
66. Joey Zhu	M.Eng Rotor Robot	2021
67. Ben Boggs	M.Eng: Mobile Robot Locomotion	2021
68. Toby Liu	M.Eng: Drop Performance	2021
69. Kunj Jain	M.Eng: Drop Performance	2021
70. Celina Chow	M.Eng: Stationary Robot Product Design	2022
71. Tamara Perreault	M.Eng: Stationary Robot Product Design	2022
72. Daniel Newell	M.Eng: Mobile Robot Locomotion	2022
73. Mina Fanaian	M.Eng: Mobile Robot Locomotion	2022
74. Edward Xia	M.Eng: Drop Performance	2022
75. Joey Zhu	M.Eng Rotor Robot	2022
76. Ben Boggs	M.Eng: Mobile Robot Locomotion	2022
77. Toby Liu	M.Eng: Drop Performance	2022
78. Kunj Jain	M.Eng: Drop Performance	2022
79. Yijun (Ian) Chen	M.DevEng: Methane Detection, Characterization & Certifications	2022
80. Jiang Qu	M.DevEng: Methane Detection, Characterization & Certifications	2022
81. Zhongyun Xu	M.DevEng: Methane Detection, Characterization & Certifications	2022
82. Yixin Zhu	M.DevEng: Methane Detection, Characterization & Certifications	2022
83. Jessalyn Rintala	M.DevEng: Sustainable Fisheries	2022
84. Barry McLaughlin	M.DevEng: Ecological Forecasting (Yellowstone)	2022

_____

85. Lin Gan	M.Eng: Early Methane Leak Detection Using Hazardous Environment Robots	2023
86. Thomas Guan	M.Eng: Early Methane Leak Detection Using Hazardous Environment Robots	2023
87. Ryan Ho	M.Eng: Early Methane Leak Detection Using Hazardous Environment Robots	2023
88. Vighnesh Rane	M.Eng: Early Methane Leak Detection Using Responders to Safely Assess Hazardous Environments	2023
89. Carol Guo	M.Eng: Creating a More User-Friendly Robot for First Responders to Safely Assess Hazardous Environments	2023
90. Rithin Venkatesh	M.Eng: Creating a More User-Friendly Robot for First Responders to Safely Assess Hazardous Environments	2023
91. Erik Takada	M.Eng: Methane Sensor Development	Estimated 2024
92. Pranav Veluri	M.Eng: Methane Sensor Development	Estimated 20243
93. Huachen Wang	M.Eng: Methane Sensor Development	Estimated 2024
94. Megan Zhang	M.Eng: Methane Sensor Development	Estimated 2024
95. Deep Shah	M.Eng: Mobile Robot – Rugged Terrain	Estimated 2024
96. Nakul Jayakar	M.Eng: Mobile Robot – Rugged Terrain	Estimated 2024
97. Raphael Levisse	M.Eng: Mobile Robot – Rugged Terrain	Estimated 2024
98. Yongqi Zheng	Tensegrity Robot Size Challenge	Estimated 2024
99. Liam Parrish	Tensegrity Robot Size Challenge	Estimated 2024
100. Ashna Reddy	Tensegrity Robot Size Challenge	Estimated 2024
101. Yuxin (Eric) Miao	Methane AI/ML Data Analytics	Estimated 2024
102. Zhuoyi (Joey) Jin	Methane AI/ML Data Analytics	Estimated 2023
103. Morris Chang	Methane AI/ML Data Analytics	Estimated 2023
104. Haorun (Rain) Liu	Methane AI/ML Data Analytics	Estimated 2023
105. Yunxi (Eric) Chang	Methane AI/ML Data Analytics	Estimated 2023

RESEARCH AND EDUCATION GRANTS

PI Status/ Year	Agency	Grant Title	Award
PI 1984/1990	NSF	Presidential Young Investigator Award	$500,000.
PI 1994/97	NSF	Concept Database: A Design Information System for Concurrent Engineering with Application to Mechatronics Design	$238,311.
PI 1994/95	NSF	Synthesis: Engineering Education Coalition grant (with 8 universities)	$3,069,509.
PI 1995/96	NSF	Synthesis: Engineering Education Coalition grant (with 9 universities)	$1,490,000.
PI 1995/96	CAL-TRANS (PATH)	PATH MOU-231: Intelligent Diagnosis Based on Validated Fused Sensor Data for Reliability and Safety Enhancement of Intelligent Vehicle Systems	$136,903.
PI 1995/96	NEC	Various Donors Gift	$10,000.
PI 1996/97	NSF	Synthesis: Engineering Education Coalition grant (with 9 universities)	$1,400,000.
PI	John Wiley & Sons	Synthesis Gift	$40,717.
PI 1997/98	NSF	Synthesis: Engineering Education Coalition grant (with 8 universities); NEEDS Supplement.	$100,000.
PI 1997/2000	GE Fund	Integrating Calculus, Chemistry, Physics and Engineering Education through Technology Enhanced Visualization, Simulation and Design Cases and Outcomes Assessment. ($450,000 over three years –1997/98, 1998/99, 1999/2000; $150,000 per year.) Co-PIs, Paul Gray and Buford Price.	$450,000.

_____

PI 1997/98	CALTRANS - PATH	PATH MOU-322: Intelligent Diagnosis Based on Validated Fused Sensor Data for Reliability and Safety Enhancement of Intelligent Vehicle Systems	$177,903.
PI 1997/98	CA MICRO	"Development of Decision Strategies for Scheduling Outages of Power Plants"	$14,426.
PI 1997/98	General Electric	Industry match to MICRO: "Development of Decision Strategies for Scheduling Outages of Power Plants"	$35,000.
PI 1998/2001	NSF	"NSF Action Agenda: Expanding the National Engineering Education Delivery System as the Foundation for an On-Line Engineering Education Community". ($800,000 over 3 years, 1998-2001).	$800,000.
PI 1998/99	CALTRANS - PATH	PATH MOU-322: Intelligent Diagnosis Based on Validated Fused Sensor Data for Reliability and Safety Enhancement of Intelligent Vehicle Systems	$34,000.
PI 1998/2000	NSF	"Using the National Engineering Education Delivery System as the Foundation for Building a Test-Bed Digital Library for Science, Mathematics, Engineering and Technology Education".	$200,000.
PI 1998/2000	Engineering Information Foundation (EIF)	"Interactive Theater Program at UC Berkeley". ($73,020 over 2 years; $40,000 in 1998/99, $33,020 in 1999/00).	$73,020.
PI 1999-2001	NSF	"Developing a Prototype National Digital Library for Science, Mathematics, Engineering and Technology Education". ($400,000 over 2 years, 1999-2001).	$400,000.
Primary Author Co-PI with James Casey 1999/2005	NSF	SUPERB (Summer Undergraduate Program of Engineering Research at Berkeley): A Proposal for an NSF REU in Bioengineering. ($295,000 total — $59,000 per year for 5 years).	$295,000.
PI 2000/2003	NSF	"Developing a Core Integration System for a National Science, Mathematics, Engineering and Technology Education Digital Library at www.smete.org".	$846,616.

_____

PI 2001/2003	NSF/Merlot	"Developing a Vision Support Planning Tool". (Two year subcontract to the Merlot project at the California State University system-wide).	$76,499.
PI 2001/2003	NSF	"Collaborative Research: Developing a Learner-Centered Metathesaurus for Science, Mathematics, Engineering and Technology Education". (Two year collaborative project, $108,766).	$108,766.
PI 2001/2003	NSF	"Enhancing Interoperability of NSDL Collections and Services". (Two year collaborative project, $1,000,000).	$1,000,000.
PI 2001/2004	NSF/Merlot	"Online Tutorials for Peer Reviewers: Scaling the Peer Review Process for National STEM Education Digital Library Collections". (Two year subcontract to the Merlot project at the California State University System-wide, 2001/02, $60,000).	$60,000.
PI 2001/2004	NSF/Merlot	"The NSDL Collaboration Finder: Connecting Projects for Effective and Efficient NSDL Development". (Two year subcontract to the Merlot project at the California State University system-wide, 2001/02, $130,000).	$130,000.
PI 2002/2003	Discovery Grant, UC Office of the President	"Learning in the Palm of Your Hand: Workshop Opportunity Grant".	$10,000.
PI 2002/2003	MICRO/GE	"MEMS "Smart Dust Motes" for Designing, Monitoring and Enabling Efficient Lighting". ($27,000 UC Office of the President, Project MICRO; $30,000 from General Electric, Corporate R&D; 2002/03).	$57,000.
PI 2002/2010	NCIIA & Lemelson Foundation	"Invention and Innovation in New Product Development: Freshman/Sophomore/Junior/Senior/ Graduate Course Sequence". ($43,250 grant, 2002/2005).	$43,250.
PI 2003/2007	NSF	"MEMS/NEMS Design Automation". ($330,00 grant for three years).	$330,000.

_____

PI 2003/2005	NSF/ Exploratorium	"Exploratorium Online: Exhibit-based Science Learning and Teaching Digital Library". (Subcontract to the Exploratorium's NSF grant of the same title, $126,597 2003/04 and $31,929 2004/05).	$158,526.
Sr. Personnel 2003/2005	NSF	"Targeted Research: Chemistry Digital Library". Two year grant with PI, Mark G. Kubinec and Co-PI, Alexander Pines, Chemistry. (My portion of the grant is $66,224 ($36,347 2003/04 and $29,877 2004/05).	$66,224.
PI 2004/2005	NCIIA & Lemelson Foundation	"The Shuttle-Tracking Service: Implementing Cost-Effective Location-Based Services"	$19,989.
PI 2004-2009	NSF	Distinguished Teaching Scholar "Designing Technology for Diversity", 4 year award.	$305,000.
PI 2004/2005	NASA AMES	"Integrated Systems Health Monitoring Using Smart Dust Mote Sensor Networks"	$90,000.
PI 2004/2005	UC Energy Institute (UCEI)	"Intelligent Commercial Lighting: Demand-Responsive Conditioning and Increased User Satisfaction"	$35,000.
PI 2004/2005	California Energy Commission Energy Innovations Small Grant (EISG) Program	"Efficient Lighting By Sensing And Actuating With MEMS 'Smart Dust Motes': A Feasibility Study"	$74,010.
PI 2004/06	UCOP Discovery Grant	"Ubiquitous Digital Library Infrastructure to Support Mobile Learning"	$89,215.
PI 2004/06	HP Match to the UCOP Discovery Grant	"Ubiquitous Digital Library Infrastructure to Support Mobile Learning"	$135,000.
PI 2004/06	Ricoh Match to the UCOP Discovery Grant	"Ubiquitous Digital Library Infrastructure to Support Mobile Learning"	$20,000.
PI 2004/2005	NCIIA & Lemelson	"Wireless Crop Protection"	$15,900.

_____

	Foundation		
PI (with Co-PI Leslie Speer from CCA) 2004/2005	Proctor and Gamble/IDSA gift	"Interdisciplinary Student Design Collaborative Underserved Markets: Migrant Communities/Workers (California Central Valley)"	$40,000.
PI 2005	NASA AMES	"Agent-Based Modeling of Human Collaboration with Intelligent Sensor Networks"	$8,830.
PI 2005/2009	NSF, NCWIT	"Digital Library for the National Center for Women in Information Technology"	$72,322.
PI 2005/2006	CISCO Systems/ NCWIT Gift	"Digital Library for the National Center for Women in Information Technology"	$8,000.
PI 2005/2009	NSF	"A Comprehensive Pathway for K-Gray Engineering Education"	$2,850,000.
PI 2006/2008	NAE/ NSF	"Pr2ove-IT Conversion to the Engineering Pathway"	$50,000.
PI 2006/2008	NCIIA & Lemelson Foundation	"SEGURO: Pesticide Protection and Warning System"	$20,000.
PI (for student team) 2006/2007	CITRIS "White Paper Competition"	"Mitigation of Water Scarcity in California Agriculture through Use of an Information Technology Platform for Environmental Data"	$7,500.
PI, 2006/2007	Chancellor's Green Campus Fund Award	"Fifty Percent Energy Savings with Innovative Energy-Efficient Office Lighting"	$4,700.
Co-PI (with Horvath, et al.)	Luce Foundation	"Sustainable Engineering through Green Design, Manufacturing and Social Infrastructures"	$550,000.
PI, UCB 2007/2010	NSF	"BPC-DP: Practices, Aggregation, Infrastructure, and Retrieval Service (PAIRS) for Broadening Participation in Computing"	$213,394.
PI 2008	Kauffman Foundation	"Evaluation of New Product Development and Sustainable Design"	$28,645.

PI 2008/2010	NCIIA & Lemelson Foundation	"CARES: Community Assessment of Renewable Energy and Sustainability Project Proposal"	$16,000.
PI	KAUST	"Research to Support the Development of a Sustainability Engineering Infrastructure in the Kingdom of Saudi Arabia"	$120,000.
Co-PI 2008/2010	NSF	"Expanding the Accessibility of NSDL for Mobile Learning", PI, Kimiko Ryokai	$150,000.
PI 2009/2011	NSF	"Expanding the Accessibility of NSDL for Mobile Learning"	$470,997.
PI 2009/13	NSF	"Pilot: meta4acle - A Software Tool for Generating Metaphors, Stimulating Creativity and Framing Solutions"	$237,159.
PI 2009/12	NSF	"Sustaining the Pathway for K-Gray Engineering Education"	$470,997.
PI 2010-12	CITRIS	Center and Green IT for Native CARES Native American Community Assessment for Renewable Energy and Sustainability	$73,216.
PI 2010/11	NCIIA	Lochlorine Chlorine Producer and Doser: Saving Lives through Safe Water.	$20,000.
PI 2011/12	NASA Ames	Expanding NASA's Capacity in Wireless Sensor Networks: Smart Buildings and Space Exploration	$109,814.
PI 2011/12	NCIIA	Student Ambassador Grant	$2,500.
PI 2012/13	NSF	CNIC: U.S.-Danish Planning Visit for Research on Smart Products and People on the Smart Grid	$16,538.
PI 2012/14	NSF	EAGER: TheDesignExchange: Characterizing, Mapping and Interacting with Industry on User-Focused Design Method	$73,538.
PI	Samsung	Human-Centric User Research to Identify	$111,610.

_____

2012/13		Disruptive Opportunities in Convergent Paper and Digital Use	
PI 2012/13	LBNL	USER-Centric Predictive - Model - Based Lighting Retrofit System	$20,000.
PI 2013	NASA Ames	Supplement: Expanding NASA's Capacity in Wireless Sensor Networks: Smart Buildings and Space Exploration	$19,508.
PI 2013	LBNL	India Building to Grid Collaborative Initiative	$2,916.
PI 2013/14	CA Energy Commission (CEC)	Model Predictive Smart Lighting Commissioning System for Emerging Demand Management: A Feasibility Study	$94,766.
PI 2012/13	Samsung Electronics	Human-Centric User Research to Identify Disruptive Opportunities in Convergent Paper and Digital Use	$111,610.
PI 2013/16	NSF	TheDesignExchange, an Interactive Portal for the Design Community of Practice	$487,091.
PI 2013/14	Samsung Electronics	Advanced UX Development Based on Innovative Technology: Integrating UX Design with the Internet of Things	$84,983.
PI 2014/15	NCIIA/ Venture Well	Just Milk	$19,997.
PI 2015/18	NASA, Early Stage Innovations	Precision Hopping/ Rolling Robotic Surface Probe Based on Tensegrity Structures	$500,000.
PI 2015/16	Peder Sather Center for Advanced Study	Open Innovation in Food Innovation and Design: Comparative Case Study of California Cuisine and New Nordic Cuisine	$20,000.
PI 2015/16	NSF I-Corp	*TheDesignExchange*: Nurturing a National Design Innovation Ecosystem	$50,000.
PI 2015-19	NASA	Approximate Models for Closed-Loop Trajectory Tracking in Underactuated Systems, Fellowship for Andrew Sabelhaus	$142,774.

_____

PI 2015/16	Samsung Electronics	Human-Centered Design Research to Explore Disruptive Opportunities with Flexible/Stretchable Wearables and the Internet of Things	$100,000
PI 2015+	Blum Center for Developing Economies	Big Ideas Award: Visualize: Saving Lives with Training for Cervical Cancer Screening, grant for student team led by Julia Kramer	$5,893.
PI 2016/17	Peder Sather Center for Advanced Study	Implementing a Sustainable Aquaculture Strategy; Perceived Drivers and Challenges in Two Distinct Innovation Systems: Norway and California. What Can We Learn from Each Other?	$23,500.
PI 2016-20	NASA	Design and Control of a Twelve-Bar Tensegrity Robot, Fellowship for Mallory Daly	$73,336.
PI 2016-21	NSF	NRT-INFEWS: STEM Training for Actionable Research and Global Impact	$2,976,889.
PI 2016/17	Samsung Electronics	Beyond Smartphones, Emerging Stretchable/Flexible Wearables Exploration in the Era of the Internet of Things, Augmented/Virtual Reality, and Data Mining	$100,000.
PI 2016/17	Center for Long-Term Cybersecurity	Human-Centered Design Study on Cybersecurity of Soft Co-Robotic Systems	$15,000.
PI 2016/17	Tech for Social Good, CITRIS	Helping Hands - Playground Edition	$2,000.
Co-PI (with PI Grace O'Connell and Co-PI Sanjay Joshi)	CITRIS Seed Funding	Million Hands: Prosthetic Hands for Children through an Open Source Platform, 3D Printers and Sensors	$60,000.
PI 2017/18	Center for Long-Term Cybersecurity	Human-Centric Research on Mobile Sensing and Co-Robotics: Developing Cybersecurity Awareness and Curricular Materials	$50,000.
PI, 2018-19	Siemens Gift	Deep Learning in Robotics	$50,000.
PI, 2019-21	Center for Long-Term Cybersecurity, William and Flora Hewlett Foundation	Design of Secure Future Mobility Solutions	$80,000.

Co-PI. 2016-21	USAID	Sustainability in Development Solutions	$4,697,374.
PI, 2016-22	NSF	NSF: NRT-INFEWS: STEM Training for Actionable Research and Global Impact	$3,162,385.
PI. 2021-2026	NSF	INCLUDES Alliance: Broadening Career Pathways in Food, Energy, and Water Systems with and within Native American Communities (Native FEWS Alliance)	$7,072,000.
Pi, 2021-2023	CITRIS	Human-Drone-Robot Teaming for Wildfire Detection: Technology and Workforce Development	$60,000 ($32,000 to UC Berkeley; $28,000 to UC Santa Cruz)

ASSOCIATE DEAN OF SPECIAL PROGRAMS (1995-EXTRA-MURAL GRANT AWARDS CENTER FOR UNDERREPRESENTED ENGINEERING STUDENTS (CUES)

Year	External Funding Agency	Proposal Title or Program	Award
1995/96	California State Legislature	Research Assistantships; California Legislative Grant (CLG)	$245,000.
1995/96	NSF	Graduate Educational Grant	$102,744.
1995/96	NSF	Summer Science Camp ($305,011 over 3 years)	$305,011.
1995/96	State-wide MESA	Secondary Program Grant	$105,848.
1995/96	School Districts (Oakland Unified; Emeryville Unified)	Augmentation to MESA Secondary Program Grant	$55,000.
1995/96	State-wide MESA (Mathematics, Engineering, Science Achievement) Program	Minority Engineering Program (MEP)	$31,995.

_____

1996/97	California State Legislature	Graduate Fellowships; California Legislative Grant (CLG)	$245,000.
1996/97	NSF	Graduate Educational Grant	$16,000.
1996/97	State-wide MESA	Minority Engineering Program (MEP)	$32,955.
1996/97	State-wide MESA	Secondary Program Grant	$140,000.
1996/97	School Districts (Oakland Unified; Emeryville Unified)	Augmentation to MESA Secondary Program Grant	$47,500.
1996/2001	SLOAN Foundation	Engineering portion of campus grant was $180,000 over a five year period (1996/2001)	$180,000.
1997/98	California State Legislature	Graduate Fellowships; California Legislative Grant (CLG)	$245,000.
1997/98	Grad Division	Diversity Grants	$2,500.
1997/98	State-wide MESA	Minority Engineering Program (MEP)	$32,955.
1997/98	Sega Foundation	Youth Education & Health Foundation	$10,000.
1997/98	State-wide MESA	Secondary Program Grant	$205,000.
1998/99	California State Legislature	Graduate Fellowships; California Legislative Grant (CLG)	$245,000.
1998/99	ARCO Foundation	MEP Grant	$35,000.
1998/99	State-wide MESA	Minority Engineering Program (MEP)	$32,955.
1998/99	State-wide MESA	Secondary Program Grant (MSP)	$226,978.
1998/99	School Districts (San Francisco Unified)	Augmentation to MESA Secondary Program Grant	$234,650.

_____

1998/99	School Districts (Oakland Unified)	Augmentation to MESA Secondary Program Grant	$55,000.
1998/99	School Districts (Emery Unified)	Augmentation to MESA Secondary Program Grant	$8,500.
1998/99	Margoes Foundation	Margoes Saturday Academy	$20,000.
1999/2005 (Co-PI, PI Buford Price)	NSF	"The Berkeley Edge: Advancing Minorities through the Ph.D. and Beyond". $500,000 ($400,000 to UC Berkeley and $100,000 to other UC campuses) per year for five years for a total of $2.5 million	$2,500,000

Associate Dean Program Operating Budgets (1995/99)

Assoc. Dean Programs	Budget 1995/96	Budget 1996/97	Budget 1997/98	Budget 1998/99
GrAD and JMEP	$461,221.	$379,304.	$400,000.	$467,063.
MESA K-12	$334,405.	$444,244.	$640,000.	$722,824.
MEP	$237,781.	$246,126.	$200,000.	$201,450.
CUES Center	$149,260.	$191,854.	$200,000.	$262,000.
CUES Annual Subtotals	**$1,182,667.**	**$1,261,528.**	**$1,440,000.**	**$1,653,337.**
Cal VIEW – Televised Instruction Program	n/a	$385,000.	$385,000.	$370,000.
Total Annual Subtotals	**$1,182,667.**	**$1,646,528.**	**$1,825,000.**	**$2,023,337.**